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**Rivulet Creekside Terrace Project  
Initial Environmental Study/  
Mitigated Negative Declaration  
ENV 01-08**



**City of Clayton  
Community Development Department  
6000 Heritage Trail  
Clayton, California 94517  
925/673-7340**

**~~March 2009~~ May 2010**

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## INTRODUCTION

The original development application for the subject properties was for a very similar mixed use project, entitled “Rivulet.” For this original development application, the City, in concert with its environmental consultant for the project, prepared an Initial Environmental Study/Mitigated Negative Declaration (IES/MND) to adequately evaluate the potential environmental impacts of the proposed “Rivulet” Project. The IES/MND was released for a 30-day public review period from March 2, 2009 to April 2, 2009. A total of six (6) public comment letters were received during the 30-day review period and one public comment hearing on the IES/MND was held before the Planning Commission during the review period. Shortly after the hearing, the project was put on hold due to the depletion of funds in the applicant’s account and his failure to replenish the deposit account.

In the interest of completing the environmental review process and getting the project site entitled for development of a mixed use project, the Clayton Redevelopment Agency has now become the applicant. In addition, a slightly revised project application has been submitted by the Redevelopment Agency and the project re-titled to “Creekside Terrace.” This IES/MND presents, in strike-through, underline format, the revisions needed to reflect the most recent project application. The changes to the original “Rivulet” project design are very minor, and generally include a reallocation of 200 square feet of ground floor residential entry space to retail space and revisions to the storm drain system design. This revised IES/MND also includes changes resulting from the responses to public comments submitted on the March 2009 Rivulet Project IES/MND (see Appendix F). Also attached, as Appendix G to this revised IES/MND, is an Errata Sheet, which includes a listing of all changes to the IES/MND as a result of public comment or in response to the most recent development application.

The revisions reflected in this IES/MND do not affect the adequacy of the previous environmental analysis contained in the “Rivulet Project” IES/MND. Generally, the changes provide clarification concerning the current development application, and in some cases, further details concerning the methodology of certain mitigation measures. Regarding the addition of Section 4, *Greenhouse Gas Emissions*, this section has been added per the State’s recent amendment of Appendix G of the CEQA Guidelines. The additional climate change information added to the Creekside Terrace IES/MND does not result in any new significant impacts associated with the proposed project. The included analysis is for informational purposes, most specifically, in order to demonstrate how the Creekside Terrace project achieves many of the design objectives identified by various authorities to reduce greenhouse gas emissions. In summary, the changes to the previous IES/MND do not result in any new significant impacts; subsequently, there is no need to recirculate the Creekside Terrace IES/MND.

The City holds public title to the underlying land and improvements on three (3) parcels located on the west side of Oak Street between High and Center Streets in the Town Center area. These three parcels will be merged along with the use of a portion (terminus) of unimproved Center Street right-of-way by License Agreement from the City of Clayton to create a parcel for the development of the ~~Rivulet~~ Creekside Terrace project. Two of these parcels are improved with single-story modular buildings; the buildings on APN 119-050-034 ~~was~~were previously occupied by PERMCO, Inc. (City Engineer firm) and the building on APN 119-050-009 was previously occupied by Clayton Mind

and Body Spa. The third parcel, APN 119-050-034, is unimproved and traversed by Mitchell Creek along its eastern edge. The existing improvements would be removed as part of the proposed project construction activities. Immediately adjacent to the north is the largely-unused right-of-way/open space extension to Center Street. It is highly unlikely that Center Street will ever be extended up the hillside.

This Initial Environmental Study/Mitigated Negative Declaration identifies potentially significant environmental impacts for the following environmental areas:

- Air Quality;
- Biological Resources;
- Cultural Resources;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Hydrology; and
- Public Services.

The environmental analysis determined that measures were available to mitigate potential adverse impacts to insignificant levels. As a result, this document serves as a Mitigated Negative Declaration pursuant to Public Resources Code Sections 21064.5 and 21080(c), and Article 6 of the California Environmental Quality Act (CEQA) Guidelines.

In accordance with the requirements of CEQA Guidelines Section 15071, this Mitigated Negative Declaration describes the proposed project; identifies, analyzes, and evaluates the potential significant environmental impacts, which may result from the proposed project; and identifies measures to mitigate adverse environmental impacts. With the mitigation measures identified in this document as well as design revisions proposed by the applicant, the project would not have a significant impact on the environment.

## I. PROJECT / APPLICANT INFORMATION

1. Project Title: Rivulet-Creekside Terrace Project
2. Lead Agency Name and Address: City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517
3. Contact Person and Phone Number: David Woltering  
Community Development Director  
City of Clayton  
(925) 673-7343
4. Project Location: 1005 and 1007 Oak Street  
City of Clayton
5. Assessor Parcel Numbers: APN 119-050-034, -008, and -009
6. Project Sponsor/Applicant: ~~Uzoma Nwakuche~~  
~~1042 Pebble Beach Drive,~~  
Clayton Redevelopment Agency  
Clayton, CA 94517  
~~925/60-8187673-7340~~
7. City Approvals Required: Lot Line Adjustment (LLA 01-08)  
Vesting Tentative Map (MAP 01-08)  
Development Plan (DP 01-08)
8. Existing *General Plan*: Town Center (TC) Commercial and  
Public Park/Open Space/Open Space and Recreation (PU)
9. Existing *Town Center Specific Plan*: Town Center (TC) Commercial
10. Existing Zoning: Planned Development (PD) District and  
Public Facility (PF)
11. Project Description Summary:

The project site is located in the City of Clayton, on the west side of Oak Street between High and Center Streets. The project involves the re-development of two properties, which are currently developed, generally level, and serviced by utilities. The third parcel is an upsloping undeveloped property with Mitchell Creek traversing at the eastern edge of the parcel near the toe of slope. The proposed project involves the construction of a two-story mixed-use building with a western-style frontage characteristic of architectural themes suggested in the *Town Center Specific Plan*. The first floor is comprised of approximately ~~7,000~~200 square feet of retail commercial space with a 20-foot ceiling. The second floor

includes seven (7) residential units. The residential units are one-bedroom and several of the units contain dens. A terrace is proposed on the creek-side of the second story.

The environmental factors checked below would be potentially affected by this project. The following Evaluation of Environmental Impacts identifies at least one impact that is a "~~Potentially Significant Impact~~" or "~~Potentially Significant Unless Mitigated~~Less Than Significant with Mitigation Incorporated" for each of the checked environmental factors.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Aesthetics                           | <input type="checkbox"/> Agriculture                                | <input checked="" type="checkbox"/> Air Quality         |
| <input checked="" type="checkbox"/> Biological Resources      | <input checked="" type="checkbox"/> Cultural Resources              | <input checked="" type="checkbox"/> Geology and Soils   |
| <input type="checkbox"/> <u>Greenhouse Gas Emissions</u>      | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology           |
| <input type="checkbox"/> Land Use and Planning                | <input type="checkbox"/> Mineral Resources                          | <input type="checkbox"/> Noise                          |
| <input type="checkbox"/> Populations and Housing              | <input checked="" type="checkbox"/> Public Services                 | <input type="checkbox"/> Transportation and Circulation |
| <input type="checkbox"/> Water, Sewer, and Stormwater Systems | <input type="checkbox"/> 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.
- X 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 since the Project proponent has made revisions in the Project and has agreed to the mitigation measures listed in “Section V. List of Mitigation Measures”. I further find that the mitigation measures and the information in this study constitute a MITIGATED NEGATIVE DECLARATION in accordance with Section 15071 of the State CEQA Guidelines.
- 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” 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 pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

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David Woltering  
Clayton Community Development Director

### III. BACKGROUND

This Initial Environmental Study/Mitigated Negative Declaration provides an environmental analysis pursuant to the California Environmental Quality Act (CEQA) for the proposed ~~Rivulet~~ Creekside Terrace Project. The applicant has submitted the respective project applications to the City of Clayton. This Initial Environmental Study/Mitigated Negative Declaration contains an analysis of the environmental effects of the proposed project. This study relies upon the program-level analysis provided in the *General Plan EIR*, as well as site-specific studies prepared for the project, in the determination of impacts.

### IV. PROJECT DESCRIPTION

#### Site Location and Description

The ~~Rivulet~~ Creekside Terrace Project site is located on the west side of Oak Street, between Center Street and High Street in the City of Clayton (see **Exhibits 1 and 2**). The project site is bisected by Mitchell Creek, with a drop-off location for children attending Mount Diablo Elementary School to the north, single-family residences and the City-owned Endeavor Hall to the south, Oak Street to the east, and rural residential development and Mount Diablo Elementary School to the west. Additionally, northeast of the site is Flora Square, a two-story commercial retail/office center currently under construction and southeast are single-family residences in the recently completed Mitchell Creek Subdivision.

The portion of the project site to be redeveloped is roughly rectangular in shape and generally level in topography. The nearest surface water to the site is Mitchell Creek, on site.

#### Project Description

##### Site Plan

The proposed project involves the removal of two existing single-story modular structures and the construction of a two-story mixed-use building (see **Exhibit 3, Site Plan**). The ground floor is proposed to consist of approximately ~~7,000~~7,200 sf of retail space. The second floor of the building would consist of seven (7) residential units with a community room and laundry/storage room that overlooks Mitchell Creek to the west.

Parking for the residential units is proposed in seven single wide garages facing High Street. Each garage is proposed to include a hydraulic lift allowing two standard sized vehicles to be stacked within the garage, resulting in a total of 14 garage spaces for the project residents. Each garage is proposed to be associated with one of the residential units, thus requiring that individual occupants coordinate the access/parking of their vehicle on the lift. In addition, each unit is proposed to be provided with a 19-foot deep driveway that would be allocated as guest parking for the project. These guest parking spaces would be located along the north side of High Street and would require that the project applicant acquire an encroachment permit from the City of Clayton (see below “*High Street and Associated Improvements*” discussion).

### Preliminary Grading Details

The building pad is proposed to “step” in elevation, consistent with the slope of Oak Street and the “fall” of Mitchell Creek as it travels from south to north. The applicant is proposing a building envelope that would face Oak Street and extend from the High Street right-of-way to the Center Street right-of-way. The creek-side portion of the building is proposed to be held back from the creek bank to a point consistent with the existing structures, and in many areas, the building would be located further from the creek banks due to the project’s removal of existing improvements that encroach near the existing top of bank. Additionally, the Preliminary Landscape Plan for the proposed project offers creek bank protection through the removal of inappropriate non-native plant materials and the installation of native and riparian vegetation.

Retail entrances are proposed to be at an elevation not exceeding a 2 percent cross-slope measured from the Oak Street sidewalk from the existing curb. This will allow for easy access to retail shops for pedestrians along Oak Street, and conformance with both City sidewalk standards and ADA requirements. The retail pad elevations, which would be implemented to achieve this proposed retail entry condition, will closely follow the existing terrain and result in close to a balanced cut/fill site.

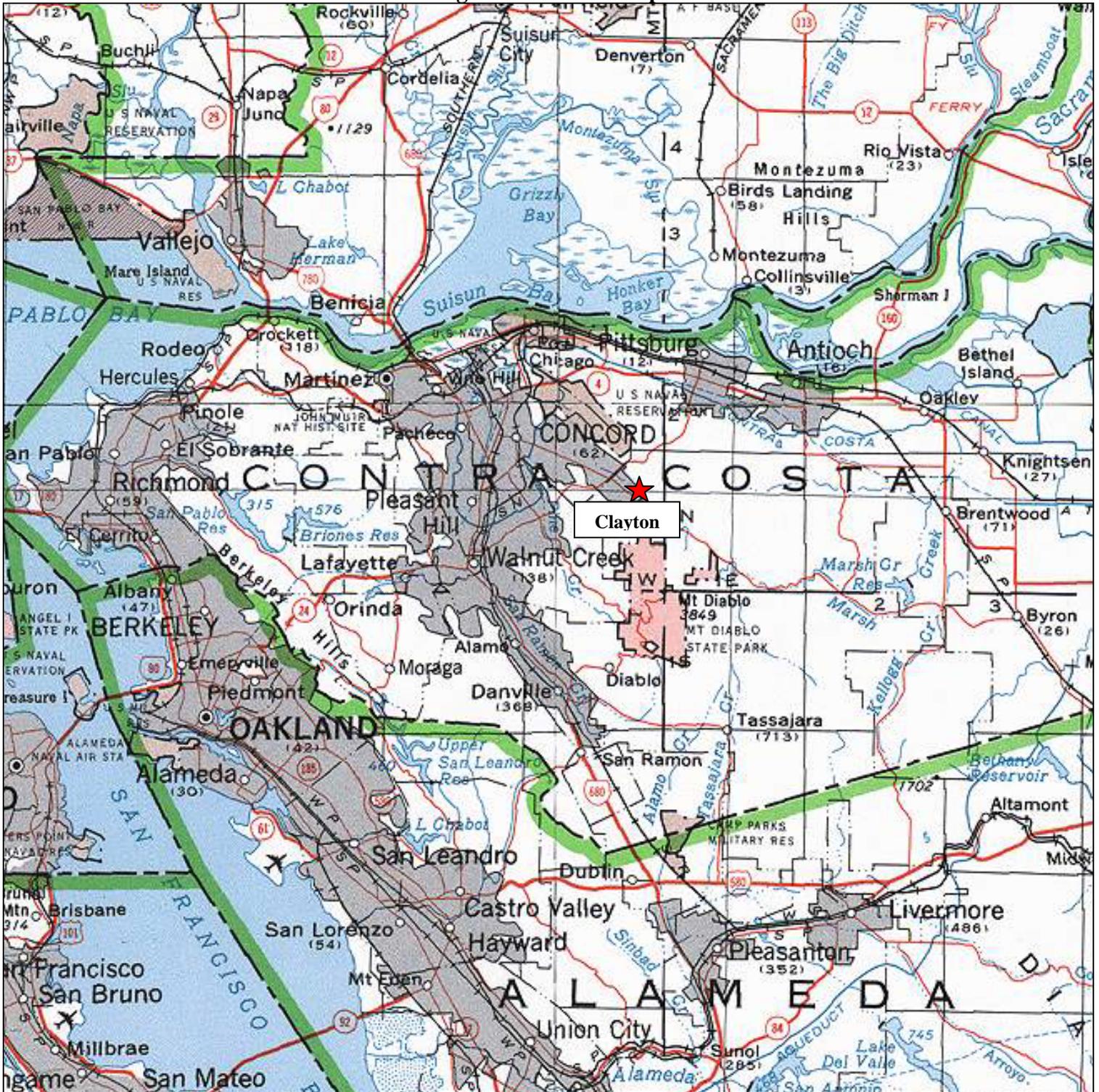
### High Street and Associated Improvements

In order to provide for convenient access to parking for guests visiting the residents of the project, the applicant has proposed to negotiate an encroachment permit for 19 feet of the High Street right-of-way. This southernmost portion of the project, which would serve as guest parking, is also planned to be improved with landscape treatments, and project and neighborhood trash enclosures. The three rural residential lots to the west of the High Street bridge currently store private residential trash receptacles within the High Street right-of-way immediately east of the bridge due to the service provider’s inability of maneuvering trash equipment on the west side of the bridge. Though existing High Street residents west of the bridge have limited options for trash service given existing constraints, the current trash storage approach is in violation of Clayton Municipal Code. The project applicant has proposed to help develop a solution to this pre-existing condition, while at the same time meeting the project’s trash needs.

### Center Street and Associated Improvements

The City is proposing to grant approval of a License Agreement for the use of a portion of ~~abandon~~ the Center Street right-of-way directly north of the project site given the unlikelihood of extending Center Street across the Mitchell Creek and up the hill to the Mt. Diablo Unified School District property. As reflected on the project’s Preliminary Landscape Plan (see **Exhibit 4**), the applicant has offered to improve this property as a part of the creek restoration plan with the addition of an interpretive area. The interpretive area will be privately maintained by the property owner and is envisioned as an improved area outside of the riparian corridor providing a seating area and descriptive plaques intended to educate users about watersheds and Mitchell Creeks’ role in such an ecosystem.

Exhibit 1  
Regional Location Map



**Exhibit 2  
Project Location Map**







#### Lot Line Adjustment (LLA 01-08)

The lot lines currently between the southern parcel (APN 119-050-034), northern parcel (APN 119-050-009), and the undeveloped parcel west of the ~~Rivulet~~ Creekside Terrace development site (APN 119-050-008) are proposed to be merged. Additionally, the right-of-way associated with the terminus of Center Street is proposed to be available for use by means of a License Agreement from the City of Clayton~~abandoned~~ and joined~~merged~~ with the area of the three parcels. The project includes a request for the approval of a lot line adjustment to merge these properties into a single parcel.

#### Tentative Subdivision Map (MAP 01-08)

The applicant is requesting the approval of a Vesting Tentative Map to subdivide the upper floor into seven (7) for-sale condominiums and related open space areas and ground floor commercial (see Exhibit 5). One of the units shall be restricted for sale and resale to a very low- or low-income qualified household term of no less than 45 years, per California Redevelopment Law.

#### Development Plan (DP 01-05)

According to the *Zoning Ordinance* (Section 17.28.050), a Development Plan is required for properties zoned PD District if the proposed project involves residential uses of 5 lots or more. Because the project involves the construction of seven residential units, a Development Plan is required.

#### **Discretionary Actions**

Approval of the Project requires the following discretionary actions by the City:

- ~~Abandonment~~ Approval of a license agreement for use of right-of-way;
- Approval of a lot line adjustment;
- Approval of a vesting tentative map for seven for-sale residential condominiums and four to five commercial condominiums; and,
- Approval of a development plan.



## V. LIST OF MITIGATION MEASURES

### Air Quality

**Mitigation Measure 1.** The following measures shall be adhered to during all construction phases of the Project:

- Earthmoving or other dust-producing activities shall be suspended during periods of high winds, (i.e., instantaneous wind gusts of 25 mph or greater);
- All exposed or disturbed soil surfaces shall be watered at least twice daily on any day of high winds or when construction activities occur, including weekends and holidays;
- Stockpiles of debris, soil, sand or other materials that can be blown by the wind, shall be watered with a soil stabilizer or covered;
- Construction areas, adjacent streets, and routes for construction traffic shall be swept of all mud and debris by a water sweeper on a daily basis (minimum) on any day when construction activities occur, including weekends and holidays;
- All trucks hauling soil, sand, or other loose materials shall be covered or maintain at least two feet of freeboard;
- A compliance officer (City Engineer unless otherwise identified as part of the grading permit process), shall be responsible for implementation and monitoring ~~shall be identified as part of the grading permit process of the above requirements.~~

### Biological Resources

**Mitigation Measure 2.** Pre-construction nesting surveys for raptors and migratory birds protected under the federal Migratory Bird Treaty Act shall be conducted if initial grading and building demolition is to be conducted during the months of March through August. A qualified biologist shall conduct the surveys no more than 14 days prior to initiation of grading, building demolition, or tree removal. If any of these species are found within the construction area after April of the construction year, grading and construction in the area shall either stop or continue only after the nests are protected by an adequate setback approved by a qualified biologist. If permanent avoidance of nests is not feasible, impacts on raptor and migratory bird nests shall be minimized by avoiding disturbances to the nest location during the nesting season unless a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from those nests are foraging independently and capable of independent survival at an earlier date. No preconstruction surveys are required if grading, building demolition, or tree removal occurs outside the nesting season (September through February).

**Mitigation Measure 3.** A preconstruction survey shall be conducted by a qualified biologist within 7-days of construction to confirm absence of any fish, amphibian, or reptile species of concern along the project reach of Mitchell Creek. In the remote instance that listed California red-legged frog or steelhead individuals are encountered, the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries) shall be consulted to determine appropriate avoidance measures prior to initiation of any construction activities. Any western pond turtle encountered shall be relocated to secure pool habitat selected by the qualified biologist.

**Mitigation Measure 4.** A qualified biologist shall be retained to oversee construction and ensure that no inadvertent take of California red-legged frog, steelhead, or western pond turtle

occurs as a result of short-term disturbance near Mitchell Creek. This shall include the following provisions:

- a) Prior to any grading or grubbing of the site, the qualified biologist shall conduct a preconstruction survey to confirm absence of any California red-legged frog, steelhead, or western pond turtle on the site, as called for in Mitigation Measure 3. A report summarizing the survey results shall be submitted to the Community Development Director.
- b) Silt fencing shall be installed at the west edge of the construction zone and to the east and west of the top of bank, buried a minimum of six inches and extending a minimum of two feet above grade, to serve as a barrier to keep ground mobile wildlife dispersing along the creek corridor from entering the construction zone. The fencing shall remain in place during the entire construction period.
- c) Construction workers shall be trained by the qualified biologist regarding the potential presence of California red-legged frog and western pond turtle, that these species are to be avoided, that the foreman must be notified if they are seen, and that construction shall be halted until appropriate measures have been taken. For California red-legged frog, work shall be halted until authorization to proceed is obtained from the USFWS. Harassment of California red-legged frog is a violation of federal law.
- d) During the construction phase of the project, a qualified biologist or an on-site monitor (such as the construction foreman trained by the qualified biologist) shall check the site in the morning and in the evening of construction activities for the presence of California red-legged frog and western pond turtle. This includes checking holes, under vehicles and under boards left on the ground. If any California red-legged frog are found, construction shall be halted, and the monitor shall immediately notify the qualified biologist in charge and the USFWS. Construction shall not proceed until adequate measures are taken to prevent dispersal of any individuals into the construction zone, as directed by the USFWS. Subsequent recommendations made by the USFWS shall be followed.
- e) No one shall handle or otherwise harass any individual California red-legged frogs encountered during construction, with the exception of a Service-approved biologist. The qualified biologist in charge shall train the on-site monitor in how to identify California red-legged frog.

**Mitigation Measure 5(a).** The Tree Preservation Guidelines called for in the Tree Report (HortScience, 2008) shall be followed to preserve native oaks and other noteworthy trees on the site. Of particular concern is the large valley oak (Tree #272), which must be heavily pruned to prevent toppling and reduce the risk to humans and property. This tree shall be retained, and recommended pruning shall be performed under the supervision of a certified arborist.

**Mitigation Measure 5(b).** The project shall conform with the City of Clayton Tree Protection Ordinance (Chapter 15.70 of the Zoning Code), through adherence to the Tree Preservation Guidelines called for in the Tree Report and provisions for replacement plantings, which will be incorporated into the Final Landscape Plan.

## **Cultural Resources**

**Mitigation Measure 6.** Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, an archaeological monitor shall be retained by the applicant and approved by the City to train the construction grading crew prior to commencement of earth-grading activity in regard to the types of artifacts, rock, bone, or shell that they are likely to find, and when work shall be stopped for further evaluation. One trained crew member shall be on-site during all earth moving activities, with the assigned responsibility of “monitor.” Should archeological, historical, or Native American artifacts or remains be discovered during construction of the Project, work in the vicinity of the find shall stop immediately until a ~~qualified archeologist or paleontologist (approved by the Community Development Director), as appropriate, the resource(s) can are evaluated and the site and determine the significance of the find~~ the appropriate means of curation is determined Project personnel shall not collect or alter cultural resources. Identified cultural resources shall be recorded on forms DPR 422 (archeological sites) and/or DPR 523 (historic resources).

## **Geology and Soils**

**Mitigation Measure 7.** Prior to the approval of ~~improvement~~ building foundation plans, the plans shall indicate the anchoring of project structures to the bedrock or the construction of a subterranean retaining wall, for review and approval ~~of by the City Engineer~~ project soils engineer and the County Building Department.

**Mitigation Measure 8.** Prior to issuance of a grading permit, the Developer shall submit, for the review and approval of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:

- Hydro-seeding;
- Placement of erosion control measures within drainageways and ahead of drop inlets;
- The temporary lining (during construction activities) of drop inlets with “filter fabric”;
- The placement of straw wattles along slope contours;
- Use of a designated equipment and vehicle “wash-out” location;
- Use of siltation fences;
- Use of on-site rock/gravel road at construction access points; and
- Use of sediment basins and dust palliatives.

## **Hazards and Hazardous Materials**

**Mitigation Measure 9.** Prior to issuance of a demolition permit by the City for any on-site structures, the Developer shall provide a site assessment, which determines whether any structures to be demolished contain asbestos. If any structures contain these materials or any other hazardous materials, the Developer shall submit an abatement plan consistent with local, state, and federal standards, subject to approval of the Contra Costa County Building Inspection Department. In addition, the site assessment shall include a site inspection and records review to determine the historic uses of the property, and whether any hazardous substances release(s) have occurred. If the assessment detects the presence of contaminated soils, a remediation plan consistent with local, state, and federal standards, shall be submitted for approval by the Contra Costa County Environmental Health Department The abatement and remediation plan(s) shall identify the

necessary measures that the applicant must comply with to fully remove any existing on-site hazards to the satisfaction of the Contra Costa County Environmental Health Department.

### **Hydrology**

**Mitigation Measure 10.** Prior to the issuance of building permits, the developer shall ~~obtain and comply with the NPDES general permit including the submittal of a Notice of Intent and associated fee to the State Water Resources Control Board and the preparation of a Storm Water Pollution Prevention Control Plan~~ that includes both construction stage and permanent storm water pollution prevention practices to be submitted to the City Engineer for review.

**Mitigation Measure 11.** All project contractors shall conform to the requirements of the “Best Management Practices for Construction Sites” required by the City, including detention and/or filter materials to preclude an increase in water quantity and quality impacts from debris and sediments entering the stormwater system over “pre-development” conditions.” The BMPs shall be included in the construction contracts for the review and approval of the City Engineer.

**Mitigation Measure 12.** The project applicant shall commit the future property owners to fully fund the construction and perpetual maintenance of the storm drain system, including monitoring of the storm drain facilities. The funding mechanism shall be acceptable to the City and shall address costs for capital replacement, inflation, and administration. This shall include the preparation of an Operation and Maintenance Plan (OMP) consistent with the model proposed by the Contra Costa Clean Water Program. Any related review or administrative fees resulting from the OMP shall be the responsibility of the property owner. The OMP will “run with the land” and be enforceable on subsequent property owners of all residential and commercial lots. Maintenance activities may include but not be limited to:

- Inspect planters for channels, exposure of soils, or other evidence of erosion. Clear any obstructions and remove any accumulation of sediment. Soils and plantings must be maintained.
- Inspect planters regularly and after storms.
- Observe soil at the bottom of the planters or filter for uniform percolation throughout. If portions of the planter or filter do not drain within 48 hours after the end of a storm, the soil should be tilled and replanted. Remove any debris or accumulations of sediment.
- Examine the vegetation to insure that it is healthy and dense enough to provide filtering and to protect soils from erosion. Replenish mulch as necessary, remove fallen leaves and debris, prune large shrubs or trees and mow turf areas. Confirm that irrigation is adequate and not excessive. Replace dead plants and remove invasive vegetation.
- Abate any potential vectors by filling holes in the ground in and around the planters and by insuring that there are no areas where water stands longer than 48 hours following the storm. If mosquito larvae are present and persistent, contact the Contra Costa County Vector Control District for information and advice. Only a licensed individual or contractor should apply mosquito larvicides only when absolutely necessary.
- Trash enclosure areas to be routinely inspected, cleared of debris, and thoroughly cleaned every three months, or as required in the City’s NPDES permit.

- All inlets to be inspected for debris twice a year, with one of those inspections held on October 1st.
- Planters should be checked for plant and landscape health. They should also be checked for removable amounts of silt. The landscape and planter soils should also be checked for aeration.

**Mitigation Measure 13.** All lots shall include deed restrictions, which provide City and other public agency personnel with the right of access to inspect all on-site stormwater control devices. The language in the deed shall be reviewed and approved by the City Engineer and City Attorney.

**Mitigation Measure 14.** The developer shall provide for flood proofing of those portions of the building below one-foot above the 100-year flood surface elevation. The method of flood proofing shall include operating procedures and be subject to the approval of the City’s Floodplain Administrator.

**Public Services**

**Mitigation Measure 15.** The Project developer shall pay a fair share contribution to the City of Clayton for impacts to police staffing directly related to impacts of the Rivulet Creekside Terrace Project for a five-year period. The calculation and payment shall be made at the time of issuance of building permit for each of the Project’s units (including residential and commercial units) and shall be approved in advance by the Clayton Police Chief and City Manager.

**Mitigation Measure 16.** The Project developer shall agree to the recordation of a conservation easement on the third parcel located west of Mitchell Creek, and shall assume full responsibility for the ongoing maintenance and upkeep of the parcel as well as the terminus of Center Street. The conservation easement shall preclude future development of said parcel while still allowing limited improvements, such as the proposed infiltration planter associated with the Creekside Terrace project.

## VI. EVALUATION OF ENVIRONMENTAL IMPACTS

### 1. AESTHETICS.

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

- a. **Would the project have a substantial adverse effect on a scenic vista?..... Less-Than-Significant Impact**

Discussion

Clayton is located at the base of the north slope of Mount Diablo. The *Clayton General Plan* identifies scenic routes and corridors within the City, which have been established in recognition of panoramic views of Mount Diablo and associated foothills. The scenic routes include Clayton Road, Marsh Creek Road, Concord Boulevard, and Oakhurst Drive. These routes are not located adjacent to the project site, and views from these routes would not be obstructed as a result of the project. Given that there are no residences located north or west of the project site, limited views of Mount Diablo would not be impeded by the project. Therefore, the impact of the project to scenic vistas would be considered *less-than-significant*.

- b. **Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? ..... Less-Than-Significant Impact**

- c. **Would the project substantially degrade the existing visual character or quality of the site and its surroundings? ..... Less-Than-Significant Impact**

Discussion (b. and c.)

The project site currently contains two commercial buildings and an associated garage. The buildings, erected in the early 1980's, would be removed as part of the project. However, as discussed in the Cultural Resources section below (see Section 5), these structures are not historically significant. Except for Mitchell Creek, which is being avoided, rock outcrops or other significant natural features are not present on the project site.

The proposed project site includes ornamental and native trees. The proposed project would remove a few of the trees. However, the developer will preserve various existing trees as described in the Biological Resources section below (see Section 4, Question e). In addition, the project plans include landscaping consistent with the *Zoning Ordinance* and would be subject to design review standards of the *Specific Plan* and *Zoning Ordinance*, which would further ensure that the project's visual character is consistent with the City's goals and policies. Furthermore, the type of development proposed for the project is consistent with the surrounding land uses, and the character of the area as proposed in the *Clayton General Plan* and the *Town Center Specific Plan*.

The eastern boundary of the project site is adjacent to Oak Street, across from which are a single-family residence and a City community building. West of the project site across Mitchell Creek is an open space slope leading to Mount Diablo Elementary School and rural residences. Single-family residences are located south and southwest of the project site, and to the southeast is the Mitchell Creek Subdivision, which was recently completed. Northeast of the project site is Flora Square, a two-story commercial retail center currently under construction; and north and northwest of the site is vacant land and open space. Two modular buildings and a garage of less-than-average condition are located on the project site. The project would result in the replacement of these structures, which would increase the aesthetic appeal of the site as a result of the proposed project architecture and proposed landscaping.

Therefore, the project would result in a *less-than-significant* impact to the existing scenic resources and visual character of the site.

- d. **Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?..... Less-Than-Significant Impact**

Discussion

The project site currently contains two commercial buildings with an associated garage. Redevelopment of the site to a mixed use project including 7,000~~200~~ sq. ft. of ground floor retail and seven second story residential units would result in increased light and glare. The project would comply with Section 8.09 of the Municipal Code which pertains to outdoor illumination and the minimization of light and glare onto adjacent properties. In addition, few sensitive receptors are located in the immediate vicinity of the project site. For example, only a few residences are located south and southeast of the project site. Therefore, because few residences adjacent to the project site would experience minor amounts of increased light and glare as a result of project implementation, and the project design will ensure minimization of light and glare, this impact would be considered *less-than-significant*.

**2. AGRICULTURE RESOURCES.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>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 (1977) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</i>					
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
c.	Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

- a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use? ..... Less-Than-Significant Impact**

Discussion

A Natural Resources Conservation Service (NRCS) Web Soil Survey indicates that the soil types on the project site are Perkins gravelly loam (PaD) and Zamora silty clay loam (ZaA)<sup>1</sup>. The *Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance Contra Costa County* prepared by the California Department of Conservation, Farmland Mapping and Monitoring Program indicates that the ZaA soil types meet the criteria for Prime Farmland as outlined in the U.S. Department of Agriculture’s Land Inventory and Monitoring (LIM) Project for the Contra Costa County Soil Survey. However, the project site is zoned P-D, is designated as Town Center Commercial (TC) in both the *Clayton General Plan* and *Town Center Specific Plan*, and has until recently, been occupied by commercial, retail, service, and office uses. Furthermore, if the project site was to be utilized for farming purposes potentially adverse impacts could result to the few residences adjacent to the site due to dust and noise. It should be noted that the parcel located west of Mitchell Creek is designated Public Park/Open Space in the General Plan and will remain undeveloped via the recordation of a conservation easement on this parcel as part of the project. Therefore, the conversion of the project site from commercial uses to a mixed use (commercial/residential) project would not result in adverse impacts to Prime Farmland and the impact would be *less-than-significant*.

<sup>1</sup> Natural Resources Conservation Service Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app/>, Accessed July 8, 2008.

- b. **Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? ..... No Impact**
  
- c. **Would the project involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use? ..... No Impact**

Discussion (b. and c.)

The Contra Costa County Assessor’s Office records indicate that none of the three parcels that make up the project site are under a Williamson Act contract. The parcels are zoned P-D and PF, and the *Clayton General Plan* and *Town Center Specific Plan* designate the site as Town Center Commercial and Public Park/Open Space/Open Space and Recreation. The parcel currently designated PF would have a conservation easement recorded prior to being merged with the two other parcels to ensure that the site is not developed in the future. As is clear in the intent of the General Plan and Town Center Specific Plan land use designation for the area of the project site proposed for development, the primary intent for this area is commercial development, not agricultural operations. The City has a specific *General Plan* land use designation and *Zoning Ordinance* designation for Agriculture. As a result, the project would have **no impact** regarding conflicts with Williamson Act contracts or existing agricultural zoning.

### 3. AIR QUALITY.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>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:</i>				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>

- a. **Would the project conflict with or obstruct implementation of the applicable air quality plan? ..... Less-Than-Significant Impact**
- b. **Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? ..... Less-Than-Significant Impact**
- c. **Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? ..... Less-Than-Significant Impact**

Discussion (a., b., and c.)

*Regional Setting*

Air quality in Clayton is primarily determined by meteorologic and topographic conditions. Clayton is located in the upper reaches of Clayton Valley. In general, valleys with box-end configurations such as the Clayton Valley have a greater susceptibility to poor air quality since temperature inversions can trap air masses. In addition, the surrounding ridges and mountains block winds, which diminish the flushing actions of winds.

The air pollution potential of the Clayton Planning Area is primarily influenced by air quality in the adjacent Concord area (*General Plan*, p. VII-18). Concord is particularly susceptible to air pollution due to regional airflow patterns in conjunction with upwind emission sources. When southwesterly or northwesterly winds occur, pollutants from the South Bay/Livermore area or North Bay are carried into the Concord area. South-

southwesterly winds predominate about 40 percent of the time while northwesterly winds occur 5 to 10 percent of the time (*General Plan*, p. VII-18). Pollutant concentrations can also increase during relatively calm periods because of local emission sources. Calm conditions occur about 30 percent of the time. Depending on the meteorological conditions at the time, pollutants in the Concord area would tend to migrate and possibly accumulate in the upper portion of the Clayton Valley at or near the Clayton Planning Area.

*Air Quality Standards*

The Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established air quality standards for common pollutants. These ambient air quality standards represent the safest levels for each contaminant, according to the various thresholds of each pollutant for causing adverse health effects. The standards cover what are called “criteria” pollutants because health and other effects of each pollutant are described in criteria documents. Although the state and federal ambient standards were developed independently, with differing purposes and methods, both processes shared an attempt to avoid health-related effects. Some differences between federal and state standards are known to exist, as illustrated in **Table 1**.

<b>Pollutant</b>	<b>Averaging Time</b>	<b>Federal Primary Standards</b>	<b>State Standard</b>
Ozone	1-Hour	N/A	0.09 PPM
	8-Hour	0.08 PPM	0.07 PPM
Carbon Monoxide	8-Hour	9.0 PPM	9.0 PPM
	1-Hour	35.0 PPM	20.0 PPM
Nitrogen Dioxide	Annual Average	0.053 PPM	0.03 PPM
	1-Hour	—	0.18 PPM
Sulfur Dioxide	Annual Average	0.03 PPM	—
	24-Hour	0.14 PPM	0.04 PPM
	3-Hour	0.5 PPM	—
	1-Hour	—	0.25 PPM
PM <sub>10</sub>	Annual Average	—	20 µg/m <sup>3</sup>
	24-Hour	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
PM <sub>2.5</sub>	Annual Average	15 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>
	24-Hour	35 µg/m <sup>3</sup>	—
Lead	30 Day Average	—	1.5 µg/m <sup>3</sup>
	Calendar Quarter	1.5µg/m <sup>3</sup>	—
Sulfates	24-Hour	—	25 µg/m <sup>3</sup>
Vinyl Chloride	24-Hour	—	0.03 PPM
Hydrogen Sulfide	1-Hour	—	0.01 PPM
PPM = Parts-per-Million µg/m <sup>3</sup> = Micrograms-per-Cubic Meter  Source: California Environmental Protection Agency Air Resources Board Web Site, www.arb.ca.gov, March 2008.			

The US EPA established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. Recently, the 1-hour ozone standard of 0.12 parts per million (PPM) was phased out and replaced by an 8-hour standard of 0.08 PPM. The San Francisco Bay area, of which Contra Costa County is a part, has been declared a non-attainment area for ozone.

In 1997, new national standards for fine particulate matter (diameter 2.5 microns or less) were adopted for 24-hour and annual averaging periods. The current PM<sub>10</sub> standards were to be retained, but the method and form for determining compliance with the standards were to be revised. Implementation of this standard was delayed by litigation and will not occur until the U.S. EPA has issued court-approved guidance.

The State of California regularly reviews scientific literature regarding the health effects and exposure to PM and other pollutants. On May 3, 2002, CARB staff recommended lowering the level of the annual standard for PM<sub>10</sub> and establishing a new annual standard for PM<sub>2.5</sub>. The new standards became effective on July 5, 2003. For 2004, Contra Costa County was a non-attainment area for state levels of PM<sub>10</sub>, but was an attainment area for the national standards.

On February 19, 2008, the Office of Administrative Law approved a new Nitrogen Dioxide ambient air quality standard, which lowers the 1-hr standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. These changes became effective March 20, 2008.

Air quality in the region is measured by the Bay Area Air Quality Management District (BAAQMD). The closest monitoring station is located in Concord. Ozone and nitrogen oxides (NO<sub>x</sub>) are more regionally oriented pollutants and their levels have decreased in the Concord area since 1978 (*General Plan*, p. VII-19). At the same time, more localized pollutants (e.g., carbon monoxide (CO), sulfur dioxide, and total suspended particulates (TSP)) experienced a peak in 1981 and have decreased since then. **Table 2** shows that concentrations of CO and NO<sub>x</sub> at the Concord monitoring site meet state/federal standards. Ozone concentrations exceeded the state and federal standards and exhibit wide variations from year-to-year related to meteorological conditions. Years where the summer months tend to be warmer than average tend to have higher average ozone concentrations while years with cooler than average temperatures tend to have lower than average ozone concentrations.

#### *Attainment Status*

##### Ozone

The federal Clean Air Act and the California Clean Air Act of 1988 require that CARB, based on air quality monitoring data, designate air basins within the state where the federal or state ambient air quality standards are not met as “non-attainment areas.” In 1995, after several years of minimal violations of the federal one-hour ozone standard, the US EPA revised the designation of the Bay Area Air Basin from “non-attainment” to “attainment” for this standard. However, with less favorable meteorology in subsequent years, violations of the one-hour ozone standard again were observed in the basin. Effective August 1998, EPA downgraded the Bay Area’s classification for this standard from a “maintenance” area to an

“unclassified non-attainment” area. With the switch to the 8-Hour averaging time the Bay area remained a non-attainment area, as shown in **Table 3**.

Pollutant	Standard	Days Standard Exceeded During		
		2005	2006	2007
Ozone	Federal 1-Hour	0	0	0
Ozone	State 1-Hour	1	8	1
Ozone	Federal 8-Hour	0	4	1
PM <sub>10</sub>	Federal 24-Hour	0	0	0
PM <sub>10</sub>	State 24-Hour	0	3	2
PM <sub>2.5</sub>	Federal 24-Hour	0	0	0
Carbon Monoxide	State/Federal 8-Hour	0	0	0
Nitrogen Dioxide	State 1-Hour	0	0	0
Sulfur Dioxide	State 24-Hour	0	0	0
Sulfur Dioxide	Federal 24-Hour	0	0	0

Source: CARB, 2008.

Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>	
		Concentration	Attainment Status	Concentration <sup>3</sup>	Attainment Status
Ozone	8 Hour	0.07 ppm (137 µg/m <sup>3</sup> )	N	0.075 ppm	N
	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	N		
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	A	9 ppm(10 mg/m <sup>3</sup> )	A
	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	A	35 ppm(40 mg/m <sup>3</sup> )	A
Nitrogen Dioxide	Annual Average	0.03 ppm (56 µg/m <sup>3</sup> )		0.053 ppm (100 µg/m <sup>3</sup> )	A
	1 Hour	0.18 ppm (470 µg/m <sup>3</sup> )	A		
Sulfur Dioxide	Annual Average			80 µg/m <sup>3</sup> (0.03 ppm <sup>3</sup> )	A
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )	A	0.14 ppm (365 µg/m <sup>3</sup> )	A
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	A		
Particulate Matter (PM10)	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	N		
	24 Hour	50 µg/m <sup>3</sup>	N	150 µg/m <sup>3</sup>	U

<b>Table 3 Ambient Air Quality Standards &amp; Bay Area Attainment Status (as of May 2008)</b>					
<b>Pollutant</b>	<b>Averaging Time</b>	<b>California Standards<sup>1</sup></b>		<b>National Standards<sup>2</sup></b>	
		<b>Concentration</b>	<b>Attainment Status</b>	<b>Concentration<sup>3</sup></b>	<b>Attainment Status</b>
Particulate Matter – Fine (PM <sub>2.5</sub> )	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	N	15 µg/m <sup>3</sup> )	A
	24 Hour			35 µg/m <sup>3</sup>	U
Sulfates	24 Hour	25 µg/m <sup>3</sup>	A		
Lead	Calendar Quarter			1.5 µg/m <sup>3</sup> )	A
	30 Day Average	1.5 µg/m <sup>3</sup> )	A		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	U		
Vinyl Chloride (chloroethene)	24 Hour	0.010 ppm (26 µg/m <sup>3</sup> )	No information available		
<b>A=Attainment N=Nonattainment U=Unclassified</b>					
mg/m <sup>3</sup> =milligrams per cubic meter		ppm=parts per million		µg/m <sup>3</sup> =micrograms per cubic meter	
<i>Source: BAAQMD, May 29, 2008.</i>					

In addition, the Bay Area Basin is currently designated non-attainment for the state 1-hour standard.

#### Carbon Monoxide

As shown in **Table 3**, the state and federal attainment status for CO was upgraded to “attainment.”

#### PM<sub>10</sub>

The state 24-hour standard for PM<sub>10</sub> is currently non-attainment, while the federal 24-hour standard is unclassified.

#### *Operational Emissions*

The BAAQMD’s CEQA Guidelines are used to evaluate among other things, whether or not a particular project is likely to generate operational emissions that would exceed the following District thresholds:

- Contribute to carbon monoxide (CO) concentrations exceeding the State Ambient Air Quality Standard of nine parts-per-million (ppm) averaged over eight hours, or 20 ppm for one hour; or
- Generate criteria air pollutant emissions in excess of the BAAQMD annual or daily thresholds. The current thresholds are 15 tons/year or 80 pounds/day for Reactive Organic Gases (ROG), Nitrogen Oxides (NO<sub>x</sub>) or PM<sub>10</sub>. Any proposed project that would individually have a significant air quality impact would also be considered to

have a significant cumulative air quality impact.

For one of the thresholds of significance (total emissions from project operations), project screening may provide a simple indication of whether a project may exceed the threshold. The BAAQMD CEQA Guidelines states on page 24 that “The Lead Agency may consult Table 6 for an indication as to whether the threshold for total emissions from project operations might be exceeded.” Table 6 on page 25 of the BAAQMD CEQA Guidelines lists various types of land uses which, based on default assumptions in the URBEMIS7G model, would result in mobile source emissions exceeding the District’s threshold of significance for NO<sub>x</sub> (80lbs/day).

Table 6 shows that for the “Apartments” residential land use category, a project containing 510 units is likely to generate 80 lbs/day of NO<sub>x</sub> and the “Regional Shopping Center” land use would require 44,000 sq ft to generate 80 lbs/day, to exceed the District’s threshold. Because the project includes the development of only seven residential units and 7,000 sq ft of retail commercial, operational emissions from the project would clearly be below the District’s established threshold of significance. Therefore, the proposed project would have a *less-than-significant* impact in regards to violating any air quality standard or contributing substantially to an existing or projected air quality violation.

**d. Would the project expose sensitive receptors to substantial pollutant concentrations? ..... Less-Than-Significant With Mitigation Incorporated**

Discussion

The above analysis in Sections ‘a-c’ does not include an assessment of the potential impacts the project would have on PM<sub>10</sub>. In the CEQA guidelines, BAAQMD has set forth thresholds of significance for construction impacts, which note that construction-related emissions are generally short-term in duration, but may still cause adverse air quality impacts. Fine particulate matter, PM<sub>10</sub>, is the pollutant of greatest concern with respect to construction activities. PM<sub>10</sub> emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on unpaved surfaces, and vehicle and equipment exhaust. Construction-related emissions can cause substantial increases in localized concentrations of PM<sub>10</sub>. Particulate emissions from construction activities can lead to adverse health effects as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces. Consequently, construction activities associated with the development of the project may result in *potentially significant* impacts to PM<sub>10</sub> levels. It should be noted that the BAAQMD guidelines state that construction impacts do not need to be quantifiably analyzed, and are assumed to be less-than-significant with implementation of standard mitigation measures, which are provided below.

Mitigation Measures

Implementation of the following BAAQMD mitigation measures would reduce the construction-related PM<sub>10</sub> impacts to a *less-than-significant* level.

**Mitigation Measure 1.** *The following measures shall be adhered to during all construction phases of the Project:*

- *Earthmoving or other dust-producing activities shall be suspended during periods of high winds, (i.e., instantaneous wind gusts of 25 mph or greater);*
- *All exposed or disturbed soil surfaces shall be watered at least twice daily on any day of high winds or when construction activities occur, including weekends and holidays;*
- *Stockpiles of debris, soil, sand or other materials that can be blown by the wind, shall be watered with a soil stabilizer or covered;*
- *Construction areas, adjacent streets, and routes for construction traffic shall be swept of all mud and debris by a water sweeper on a daily basis (minimum) on any day when construction activities occur, including weekends and holidays;*
- *All trucks hauling soil, sand, or other loose materials shall be covered or maintain at least two feet of freeboard;*
- *A compliance officer (City Engineer unless otherwise identified as part of the grading permit process), shall be responsible for implementation and monitoring ~~shall be identified as part of the grading permit process of the above requirements.~~*

e. **Would the project create objectionable odors affecting a substantial number of people? ..... No Impact**

Discussion

The project would not include industrial or intensive agricultural use; therefore, the project would not create odors or toxic air contaminants. The proposed project would have *no impact* on odors or toxic air contaminants.

**4. GREENHOUSE GAS EMISSIONS**

<b><u>Issues</u></b>	<b><u>Potentially Significant Impact</u></b>	<b><u>Less Than Significant with Mitigation Incorporated</u></b>	<b><u>Less Than Significant Impact</u></b>	<b><u>No Impact</u></b>
<i>Would the project:</i>				
a) <u>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <u>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?.....Less-Than-Significant**

**b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? .....Less-Than-Significant**

Discussion

Background

There is evidence that the Earth’s climate has been warming over the past century because of the buildup in the atmosphere of greenhouse gases (GHGs) emitted from human activity. Greenhouse gases have varying global warming potentials. The major components of greenhouse gases include carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O) and methane, (CH<sub>4</sub>). Ozone is a greenhouse gas; however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and therefore is not global in nature. The burning of fossil fuels is the largest source of GHGs, particularly carbon dioxide. Greenhouse gases act much like a blanket, trapping the Earth’s heat in the atmosphere and resulting in an increase in the global mean temperature. A warmer global climate could have significant effects on local and regional weather patterns, agricultural production, flooding and water resources, and the distribution of plant and animal species among other impacts.

In 2006, California enacted the California Global Warming Solutions Act (AB 32). The Act requires California to reduce its emission of GHGs to the statewide level emitted in 1990 by 2020. The Act charges the California Air Resources Board (CARB) with the task of developing, with public input, a plan for reducing GHG emissions and implementing that plan by January 2012.

As directed by SB97, the Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010. Amended CEQA Guidelines Section 15064.4, states that, in determining the significance of greenhouse gas emissions, a “lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- (2) Rely on a qualitative analysis or performance based standards.”

As demonstrated below, calculating the approximate GHG emissions from automotive vehicles that would result from buildout of the proposed project is possible; however, it should be noted that the emissions calculations have significant limitations. These calculations allow the user to estimate GHG emissions in pounds per day or tons of CO<sub>2</sub> per year for various land uses and projects. However, the GHG emissions calculations presented here only evaluate and model aggregate CO<sub>2</sub> emissions – they do not demonstrate, with respect to a global impact, how much of these aggregate emissions are in fact “new” emissions specifically attributable to the development resulting from approval of the proposed project.

The proposed project for the most part would not “create” GHG emissions. Instead, by adding businesses and residents to the area, the project would create conditions under which emissions would “move” from one area to another, as an existing driver moves from one area to the other. This fact is critically important, because the approval of the proposed project would not directly result in the creation of new drivers – the primary source of the proposed project’s emissions. Thus, the use of models that measure overall emissions, without accounting for existing emissions, overstates the proposed project’s impact related to GHG emissions. Overstating the impacts of the proposed project on GHG emissions could lead to misallocation of resources in seeking solutions to GHG emissions and climate change problems. For example, a more effective approach to reducing GHG emissions to assist with resolving climate change issues could include State or federal regulations on fuel formulation, as California is attempting to do with the Low Carbon Fuel Standard.

### Analysis

BAAQMD has jurisdiction over much of the nine-county Bay Area. The current BAAQMD CEQA Guidelines do not provide any significance thresholds for GHG emissions. In December 2009, the BAAQMD circulated an updated draft guidance document which is to be considered for adoption in April 2010. Proposed new significance thresholds include quantitative threshold of significance for GHG emissions. The proposed updated guidance provides that a development project, other than a stationary source, would have a significant

cumulative impact unless:

- The project can be shown to be in compliance with a qualified Climate Action Plan;
- Project emissions of CO<sub>2</sub> equivalent GHGs (CO<sub>2</sub>e) are less than 1,100 metric tons per year; or
- Project emissions of CO<sub>2</sub> equivalent GHGs are less than 4.6 metric tons per year per service population (residents plus employees).

However, the Draft BAAQMD CEQA Guidelines contain screening thresholds for GHG emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration. In addition, the screening criteria in this section do not account for project design features, attributes, or local development requirements that could also result in lower emissions. For projects that are mixed-use, infill, and/or proximate to transit service and local services, emissions would be less than the greenfield type project that these screening criteria are based on.

The screening criteria developed for greenhouse gases were derived using the default emission assumptions in URBEMIS and using off-model GHG estimates for indirect emissions from electrical generation and water conveyance. Projects below the applicable screening criteria shown in Table 3-1 of the Guidelines would not exceed the 1,100 MT of CO<sub>2</sub>e/yr GHG threshold of significance for projects other than stationary sources. The relevant screening criteria from Table 3-1 are as follows:

	<b><u>Operational Criteria Pollutant Screening Size</u></b>	<b><u>Operational GHG Screening Size</u></b>
<u>Condo/townhouse, general</u>	<u>451 du (ROG)</u>	<u>78 du</u>
<u>Quality Restaurant</u>	<u>47 ksf (NOX)</u>	<u>9 ksf</u>

Given that the Creekside Terrace project would consist of seven (7) dwelling units and approximately 7,200 sf of ground-floor retail uses, the project would not exceed the District's draft GHG emissions threshold.

Furthermore, as shown in Table 4, potential greenhouse gas emissions for both construction and operation of the proposed project have been calculated. The below numbers are considered to be very conservative as they do not take into account the greenhouse gas emissions of the existing structures that will be removed. In addition to the difficulty in following the CEQA requirements described above, to accurately account for greenhouse gas emissions attributable to the project, it would be necessary to differentiate between new sources that otherwise would not exist but for the project, and existing sources that have simply relocated to the project area (presumably from anyplace in the world).

<b><u>Table 4</u></b> <b><u>Short-Term Construction and Operational Greenhouse Gas Emissions for Proposed Project</u></b>	
<b><u>Source</u></b>	<b><u>Maximum CO<sub>2</sub> Equivalent (Tons/Year)</u></b>
<u>Construction Equipment Exhaust</u>	<u>98.80</u>
<u>Operational (Motor Vehicles)</u>	<u>927.41</u>
<b><u>Notes:</u></b> <u>Equipment Exhaust: Emissions were calculated using the URBEMIS2007 (Version 9.2.4) computer program.</u> <u>Construction Waste: Emissions were calculated based on data obtained from the USEPA for construction generated debris and waste (USEPA 1998).</u>	

Greenhouse Gas Emission Strategies of the Creekside Terrace Project

In March 2008, the California Attorney General issued a paper for use by local agencies in carrying out their duties under CEQA as they relate to global warming. Included were examples of various measures that may reduce the emissions of individual projects that result in global warming. As noted in the paper, each of the measures should not be considered in isolation, but as part of a larger set of measures, that together, would help reduce greenhouse gas emissions and the effects of global warming. In June 2008, the Governor’s Office of Planning and Research released a technical advisory on addressing climate change in CEQA documents. The advisory included examples of greenhouse gas reduction measures, but did not require the implementation of any particular measure. The measures included in the technical advisory are substantially similar to the measures proposed by the Attorney General.

Table 5 lists the measures from the California Attorney General’s office that are applicable to the proposed Creekside Terrace project and indicates the whether, and how, the project would conform to the measures.

<b><u>Table 5</u></b> <b><u>Greenhouse Gas Emissions Measures – Creekside Terrace Project</u></b>	
<b><u>Office of the California Attorney General</u></b> <b><u>Methods to Offset or Reduce Global Warming</u></b> <b><u>Impacts</u></b>	<b><u>Creekside Terrace Compliance</u></b>
<b><u>Energy Efficiency</u></b>	
<u>Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.</u>	<u>The project will be designed for energy efficiency.</u>
<u>Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.</u>	<u>The project will include the installation of efficient lighting and lighting control systems.</u>
<u>Install light colored “cool” roofs, cool pavements, and strategically placed shade trees.</u>	<u>Strategically placed shade trees will be utilized. Cool pavements and cool roofs will be included pending appropriateness of design and feasibility.</u>

**Table 5**  
**Greenhouse Gas Emissions Measures – Creekside Terrace Project**

<b><u>Office of the California Attorney General</u></b> <b><u>Methods to Offset or Reduce Global Warming</u></b> <b><u>Impacts</u></b>	<b><u>Creekside Terrace Compliance</u></b>
<u>Install energy efficient heating and cooling systems, appliances and equipment, and control systems.</u>	<u>The project will include the installation of energy-efficient heating and cooling systems, appliances, equipment, and control systems to the maximum extent feasible.</u>
<u>Limit the hours of operation of outdoor lighting.</u>	<u>Sufficient lighting for safety purposes will be required consistent with tenant hours. However, phased or zoned lighting reductions will be utilized in areas with reduced tenant hours.</u>
<b><u>Renewable Energy</u></b>	
<u>Install solar and wind power systems, solar and tankless hot water heaters, and energy-efficient heating ventilation and air conditioning. Educate consumers about existing incentives.</u>	<u>Energy-efficient heating and ventilation will be utilized. Solar power systems will be considered. Solar and tankless water heaters will be considered and utilized where feasible.</u>
<b><u>Water Conservation and Efficiency</u></b>	
<u>Create water-efficient landscapes.</u>	<u>Water-efficient landscaping design and material will be utilized.</u>
<u>Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.</u>	<u>Water-efficient irrigation systems and devices will be utilized.</u>
<u>Design buildings to be water-efficient. Install water-efficient fixtures and appliances.</u>	<u>Water-efficient fixtures and appliances will be utilized.</u>
<u>Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.</u>	<u>Watering methods will be utilized that control runoff and restrict water to non-vegetated surfaces.</u>
<u>Restrict the use of water for cleaning outdoor surfaces and vehicles.</u>	<u>Restriction on the use of water for cleaning outdoor surfaces and vehicles will be implemented, through CC&amp;Rs, consistent with any specific policies set forth by CCWD.</u>
<b><u>Solid Waste Measures</u></b>	
<u>Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).</u>	<u>Reuse and recycling of construction waste will be implemented to the maximum extent feasible.</u>
<u>Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.</u>	<u>Separate waste and recycling receptacles will be utilized on-site. Interior and exterior storage areas for recyclables will be located within the project site.</u>
<b><u>Land Use Measures</u></b>	
<u>Include mixed-use, infill, and higher density in development projects to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods.</u>	<u>The proposed project is an infill development. In addition, the project would develop the site at a higher density than the existing conditions. The project would living and entertainment options to local residents and workers, which could result in a reduction of vehicle trips.</u>
<u>Incorporate public transit into project design.</u>	<u>The project is located in an area served by public transit.</u>
<u>Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.</u>	<u>The project includes the parcel west of Mitchell Creek, which is currently in an open space condition. As part of the project, a conservation easement will be recorded across this parcel so that it will be maintained in an open space condition in perpetuity.</u>
<u>Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.</u>	<u>Pedestrian paths/facilities are located adjacent to project on existing street network.</u>
<b><u>Transportation and Motor Vehicles</u></b>	
<u>Limit idling time for commercial vehicles, including delivery and construction vehicles.</u>	<u>State law regulates idling of commercial vehicles and prohibits idling for longer than five consecutive minutes or five total minutes in one hour.</u>
<u>Use low or zero-emission vehicles, including construction</u>	<u>Low or zero-emission vehicles will be utilized to the maximum</u>

**Table 5**  
**Greenhouse Gas Emissions Measures – Creekside Terrace Project**

<b><u>Office of the California Attorney General</u></b> <b><u>Methods to Offset or Reduce Global Warming</u></b> <b><u>Impacts</u></b>	<b><u>Creekside Terrace Compliance</u></b>
<u>vehicles.</u>	<u>extent feasible.</u>
<u>Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).</u>	<u>The project applicant will work with the City to determine the appropriate number and location of electric vehicle charging facilities.</u>
<u>Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.</u>	<u>The project is a relatively small development that would not incorporate improvements that would alter the existing street system.</u>
<u>Incorporate bicycle-friendly intersections into street design.</u>	<u>The project entrance would have clear lines of sight for both bicyclists and motorists.</u>
<u>For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, e.g., locked bicycle storage or covered or indoor bicycle parking.</u>	<u>The project will provide adequate bicycle rack parking near building entrances.</u>

The proposed Creekside Terrace project is surrounded by existing development, and is considered to be an infill project. As identified above in Table 5, infill development is one of the greenhouse gas reduction strategies advocated by the Attorney General. Infill developments can reduce commutes, provide amenities closer to existing residences, and can reduce development pressure on undeveloped lands at the periphery of cities. Therefore, the proposed Creekside Terrace project is appropriately located and designed to minimize the emissions of greenhouse gases and thereby reduce the project’s contribution to global climate change to a *less-than-significant* level.

**45. BIOLOGICAL RESOURCES.**

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
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 marshes or vernal pools) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, including trees?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>

- a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ..... Less-Than-Significant With Mitigation Incorporated**

Discussion

The following discussion is based upon the Biological Resource Assessment prepared for the project site by Environmental Collaborative (see Appendix A to this IES/MND).

Construction of the proposed project would require demolition of the existing buildings, removal of the ornamental landscape species, and grading on the developed portion of the site as well as the construction of an 800 square foot infiltration planter on APN 119-050-008, which would otherwise remain undeveloped with an overlying conservation easement. The proposed bio-retention facility would be located approximately 40 feet from the nearest edge of Mitchell Creek. In general, this is not expected to result in any adverse impacts on

special-status species. Essential habitat for listed species known from the Mt. Diablo vicinity, such as Alameda whipsnake, California tiger salamander, western pond turtle, and California red-legged frog, is absent on the site. Similarly, no occurrences of special-status plant species have been reported from the site or immediate vicinity, and no populations are believed to occur on the site.

Preconstruction surveys and construction zone exclusion practices would serve to avoid the remote potential for take of California red-legged frog, steelhead, and western pond turtle in the unlikely and remote instance that these species were present or were to disperse along the Mitchell Creek corridor onto the site. The potential for any of these species to be found outside the active creek channel on the site is even less likely, but implementation of these measures as part of the project would serve to completely avoid any inadvertent take of these species. Areas disturbed during construction would be revegetated and restored, and no habitat would be lost for any special-status species as a result of the short-term construction disturbance associated with the project. Enhancement plantings proposed along the bank and building setback as part of the project as indicated in the Landscape Plan (see **Exhibit 4**) would provide additional shading of the habitat along the creek, as well as additional protective cover for terrestrial and aquatic species.

Several species of raptors from the Clayton vicinity may occasionally forage on the site or vicinity, but no nesting activity has been observed on the site. However, there remains a remote possibility that nests could be established in trees, shrubs, or suitable ground nesting locations prior to initiation of grading or construction. If new nests are established, grading or grubbing could result in inadvertent loss of nesting birds unless adequate protective measures are taken. Therefore, the potential loss of nesting birds would result in a **potentially significant** impact.

#### Mitigation Measure(s)

Implementation of the following mitigation measure would ensure the impact is *less-than-significant*.

**Mitigation Measure 2.** *Pre-construction nesting surveys for raptors and migratory birds protected under the federal Migratory Bird Treaty Act shall be conducted if initial grading and building demolition is to be conducted during the months of March through August. A qualified biologist shall conduct the surveys no more than 14 days prior to initiation of grading, building demolition, or tree removal. If any of these species are found within the construction area after April of the construction year, grading and construction in the area shall either stop or continue only after the nests are protected by an adequate setback approved by a qualified biologist. If permanent avoidance of nests is not feasible, impacts on raptor and migratory bird nests shall be minimized by avoiding disturbances to the nest location during the nesting season unless a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from those nests are foraging independently and capable of independent survival at an earlier date. No preconstruction surveys are required if grading, building demolition, or tree removal occurs outside the nesting season (September through February).*

**Mitigation Measure 3.** A preconstruction survey shall be conducted by a qualified biologist within 7-days of construction to confirm absence of any fish, amphibian, or reptile species of concern along the project reach of Mitchell Creek. In the remote instance that listed California red-legged frog or steelhead individuals are encountered, the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries) shall be consulted to determine appropriate avoidance measures prior to initiation of any construction activities. Any western pond turtle encountered shall be relocated to secure pool habitat selected by the qualified biologist.

**Mitigation Measure 4.** A qualified biologist shall be retained to oversee construction and ensure that no inadvertent take of California red-legged frog, steelhead, or western pond turtle occurs as a result of short-term disturbance near Mitchell Creek. This shall include the following provisions:

- a) Prior to any grading or grubbing of the site, the qualified biologist shall conduct a preconstruction survey to confirm absence of any California red-legged frog, steelhead, or western pond turtle on the site, as called for in Mitigation Measure Mitigation Measure 3. A report summarizing the survey results shall be submitted to the Community Development Director.
- b) Silt fencing shall be installed at the west edge of the construction zone and to the east and west of the top of bank, buried a minimum of six inches and extending a minimum of two feet above grade, to serve as a barrier to keep ground mobile wildlife dispersing along the creek corridor from entering the construction zone. The fencing shall remain in place during the entire construction period.
- c) Construction workers shall be trained by the qualified biologist regarding the potential presence of California red-legged frog and western pond turtle, that these species are to be avoided, that the foreman must be notified if they are seen, and that construction shall be halted until appropriate measures have been taken. For California red-legged frog, work shall be halted until authorization to proceed is obtained from the USFWS. Harassment of California red-legged frog is a violation of federal law.
- d) During the construction phase of the project, a qualified biologist or an on-site monitor (such as the construction foreman trained by the qualified biologist) shall check the site in the morning and in the evening of construction activities for the presence of California red-legged frog and western pond turtle. This includes checking holes, under vehicles and under boards left on the ground. If any California red-legged frog are found, construction shall be halted, and the monitor shall immediately notify the qualified biologist in charge and the USFWS. Construction shall not proceed until adequate measures are taken to prevent dispersal of any individuals into the construction zone, as directed by the USFWS. Subsequent recommendations made by the USFWS shall be followed.
- e) No one shall handle or otherwise harass any individual California red-legged frogs encountered during construction, with the exception of a Service-approved biologist. The qualified biologist in charge shall train the on-site monitor in how to identify California red-legged frog.

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

Discussion

Most of the site is not considered a sensitive natural community type, and the Mitchell Creek corridor would be avoided as part of the development-related aspects of the project, protecting this sensitive riparian community type. The new building would be setback a minimum of 10 feet from the top-of-bank, extending no closer to the top of bank than the existing structures and mature native trees would be retained. The creek corridor would be enhanced as part of the project through removal of invasive tree-of-heaven and plantings of additional native riparian plantings as indicated in the Landscape Plan. The new structure would be setback at least as far as the existing structures, and access would be restricted away from the creek. The proposed removal of invasive species and additional native plantings would improve the existing habitat values and increase the native species diversity along this reach of Mitchell Creek. The small plaza area proposed at the northern edge of the site would include interpretive signage describing the sensitivity of the creek corridor and importance of protecting creek habitat. This overlook would be sited in a location designed to impede and discourage the current foot traffic of pedestrians crossing the creek and denuding the banks. Controls specified in the Tree Report to avoid damage to mature trees to be retained and Best Management Practices (BMP) implemented as part of the Storm Water Pollution Plan for the project would prevent sedimentation in the creek channel and would serve to protect the riparian sensitive natural community along Mitchell Creek. Therefore, with implementation of the Storm Water Pollution Plan and Landscape Plan, a *less-than-significant* impact would occur to riparian habitat or other sensitive natural communities.

- c. **Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marshes or vernal pools) through direct removal, filling, hydrological interruption, or other means? ..... Less-Than-Significant Impact**

Discussion

Improvements or direct modifications to the Mitchell Creek channel are not proposed as part of this project. The new structure would be setback a minimum of 10 feet from the top of bank and the existing native trees would be retained along the creek channel. The creek corridor would be enhanced as part of the project through removal of the invasive tree-of-heaven and installation of native riparian species, such as California buckeye, California rose, and flowering current, as indicated in the Landscape Plan. Enhancement plantings would be installed above the Ordinary High Water Mark (OHWM), which serves as the jurisdictional limits of the Corps. Authorization from the Corps under Section 404 of the

Clean Water Act would not be required as no improvements are proposed below the OHWM of the creek and no wetlands would be filled or modified by the project. Informal consultation with the CDFG indicates that the creek corridor modifications proposed as part of the project would not require their authorization under the Streambed Alteration Agreement process (Kozicki, February 2009). This includes construction of new structures, the creek overlook, thinning of the canopy to the leaning valley oak (Tree #272), removal of invasive tree-of-heaven, and installation of native riparian enhancement plantings along the creek bank and adjacent uplands.

Adequate protections would be necessary and implemented as part of the project to prevent the secondary effects of sedimentation and water quality degradation as a result of construction-related disturbance. Best Management Practices would be implemented as part of the project, which would ensure that the potential for any downgradient sedimentation impacts are adequately controlled. These potential indirect impacts would be addressed by the required Stormwater Pollution Prevention Plan and other controls to protect long-term water quality in Mitchell Creek called for in the Hydrology section of this IES/MND. Therefore, a *less-than-significant* impact would occur.

- d. Would the project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? ..... Less-Than-Significant Impact**

Discussion

The proposed project is not expected to have a significant impact on existing wildlife habitat, interfere substantially with the movement of resident or migratory wildlife, or impede access or use of wildlife nursery locations. The new structure would be restricted to the vicinity of the existing structures, and a minimum setback of 10 feet would be provided from the top-of-bank to Mitchell Creek. Given that the new building would be sited basically within the footprint of the existing structures and landscaped areas, and this portion of the site is of relatively low value to wildlife, no significant impacts on existing wildlife habitat are anticipated. Mature native trees would not be removed, and the creek corridor would be enhanced through removal of invasive tree-of-heaven and plantings of native riparian species, as indicated in the Landscape Plan. Direct impacts to Mitchell Creek are not anticipated, and the creek would still be available for dispersal and movement of any aquatic and terrestrial species currently associated with the site. Overall, the enhancement proposed along the creek would serve to improve the habitat values of the corridor. Therefore, the project would not interfere with the movement of migratory fish or wildlife species and *less-than-significant* impact would occur.

**e. Would the project conflict with any local policies or ordinances protecting biological resources, including trees? Less-Than-Significant With Mitigation Incorporated**

Discussion

The proposed application would generally conform to the relevant policies and ordinances of the City of Clayton. This includes the Tree Protection Ordinance (Chapter 15.70 of the Zoning Code), which calls for the protection of certain species of trees, a permit when removal of any tree with a trunk diameter of six inches or greater is proposed, and replacement plantings. The *Tree Report* provides a thorough inventory of trees on the site. The recommendations contained in this report regarding selected tree preservation and construction avoidance are adequate, but the report recommends that the mature leaning valley oak (Tree #272) along the creek bank be removed. The *Tree Report* acknowledges that this tree could be retained through removal of 50 percent of the canopy, which is preferable given the tree's importance to the existing riparian corridor along Mitchell Creek.

Adherence to sensitive construction practices called for in the *Tree Report*, or provisions for replacement plantings would ensure conformance with the intent of the City's ordinance. Additional tree plantings proposed as part of the Landscape Plan (see **Exhibit 4**) for the project, including enhancement plantings along the creek corridor, would serve to replace the ornamental trees to be removed as part of site development. Therefore, without conformance to the City of Clayton Tree Protection Ordinance and *Tree Report*, a **potentially significant** impact would occur.

Mitigation Measure

Implementation of the following mitigation measure would ensure the impact is *less-than-significant*.

**Mitigation Measure 5(a).** *The Tree Preservation Guidelines called for in the Tree Report (HortScience, 2008) shall be followed to preserve native oaks and other noteworthy trees on the site. Of particular concern is the large valley oak (Tree #272) which must be heavily pruned to prevent toppling and reduce the risk to humans and property. This tree shall be retained, and recommended pruning shall be performed under the supervision of a certified arborist.*

**Mitigation Measure 5(b).** *The project shall conform to the City of Clayton tree Protection Ordinance (Chapter 15.70 of the Zoning Code), through adherence to the Tree Preservation Guidelines called for in the Tree Report and provisions for replacement plantings, which will be incorporated into the Final Landscape Plan.*

**f. Would the project conflict with the provisions of an adopted habitat conservation plan? ..... No Impact**

Discussion

The proposed project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved conservation plan. The East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) was recently adopted by the participating agencies, and became effective in the City of Clayton in January 2008. The HCP/NCCP is intended to provide a coordinated,

regional approach to special-status species conservation and development regulation. A total of 28 species are covered under the HCP/NCCP, including California red-legged frog, California tiger salamander, Alameda whipsnake, San Joaquin kit fox, vernal pool tadpole shrimp, and burrowing owl, among others. The HCP/NCCP provides streamlined permits from the U.S. Fish and Wildlife Service (USFWS) and CDFG for covered species for new urban development projects and a variety of public infrastructure projects. The goal is to eventually provide coverage for agency authorizations for wetland-related impacts, but these are currently not covered under the HCP/NCCP.

Although the City of Clayton is a participating agency and the project site is located within the HCP/NCCP boundaries, the proposed project is exempt because the project site is identified as an Urban land cover type in the HCP/NCCP. Because the project is exempt as a regulated development project under the HCP/NCCP, conformance with the adopted plan is not required, no impacts are anticipated, and no fees would be assessed. However, the project has been designed or conditioned through mitigation specified in this Initial Study to avoid possible inadvertent take of special-status species, minimize disturbance to the Mitchell Creek corridor, and restore and enhance existing habitat along the creek corridor, which would be consistent with the general goals of the HCP/NCCP. Therefore, with project site is exempt from the HCP/NCCP and *no impact* would occur.

**56. CULTURAL RESOURCES.**

Issues		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
c.	Directly or indirectly destroy a unique paleontological resource on site or unique geologic features?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
d.	Disturb any human remains, including those interred outside of formal cemeteries.	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

- a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? ..... Less-Than-Significant Impact**

Discussion

As stated above, the project site is comprised of two parcels in the *Town Center Specific Plan* area. The southern parcel fronting on Oak Street (APN 119-050-034) contains two structures. One is an approximately 2,400 sf modular building erected in the early 1980s to house the Clayton Police Department. Upon completion of the renovated DeMartini Winery the Police Department vacated the modular building and occupied the winery with the rest of the City Staff. Shortly thereafter the City leased the building to PERMCO Engineers (City of Clayton, City Engineer). Additionally, a small garage, utilized by PERMCO is located directly on the bank of the creek, southwest of the PERMCO building.

The parcel to the north (APN 116-050-009) also contains a modular structure (approx. 1,700 sf) originally utilized as the City Offices. This structure was also vacated by the City upon completion of the DeMartini Winery restoration. The building is currently leased by the City to the Clayton Mind and Body Spa.

Both PERMCO and Clayton Mind and Body have vacated their buildings and moved to nearby locations given the plans to redevelop these properties. All three buildings have ongoing maintenance and repair issues related to roof leaks, deck, stair and railing repair, and other normal problems associated with maintenance of older buildings.

The parcel to the west (APN 119-050-008) is currently unimproved and anticipated to be merged with the other two parcels to be a part of the site of this proposed project. A conservation easement would be recorded across the parcel so that it would remain undeveloped with the exception of the 800 square foot infiltration planter associated with the proposed project. It is important to note that none of the project structures are listed in the *Clayton Heritage Preservation Task Force Report* as recommended historic sites. As the existing on-site structures are not listed as historic resources, a *less-than-significant* impact would result.

- b. **Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?..... Less-Than-Significant With Mitigation Incorporated**
- c. **Would the project directly or indirectly destroy a unique paleontological resource on site or unique geologic features?Less-Than-Significant With Mitigation Incorporated**
- d. **Would the project disturb any human remains, including those interred outside of formal cemeteries. .... Less-Than-Significant With Mitigation Incorporated**

Discussion (b., c., and d.)

The nearest archaeological site is CCo-222, otherwise known as the Keller Ranch site, located in and around the Community Library and the Keller Ranch house located north of the Community Library.

The project site consists largely of existing development. Although unlikely, the possibility does exist that cultural resources could be unearthed during project construction activities. As a result, the project could have a *potentially significant* impact to archaeological resources.

Mitigation Measure

The following mitigation measure would reduce the impact from the proposed project to a *less-than-significant* level.

***Mitigation Measure 6.*** *Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, an archaeological monitor shall be retained by the applicant and approved by the City to train the construction grading crew prior to commencement of earth-grading activity in regard to the types of artifacts, rock, bone, or shell that they are likely to find, and when work shall be stopped for further evaluation. One trained crew member shall be on-site during all earth moving activities, with the assigned responsibility of “monitor.” Should archeological, historical, or Native American artifacts or remains be discovered during construction of the Project, work in the vicinity of the find shall stop immediately until a qualified archeologist or paleontologist (approved by the Community Development Director), as appropriate, the resource(s) can be evaluated and the site and determine the significance of the find the appropriate means of curation is determined* Project personnel shall not collect or alter cultural resources. Identified cultural resources shall be recorded on forms DPR 422 (archeological sites) and/or DPR 523 (historic resources).

**67. GEOLOGY AND SOILS.**

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
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 based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. 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?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in the Uniform Building Code?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>

**a-i. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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 based on other substantial evidence of a known fault? ..... Less-Than-Significant Impact**

**a-ii. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking? ..... Less-Than-Significant Impact**

Discussion (a-i. and a-ii.)

According to the *General Plan*, the Concord Fault is located near the project site and is known to be active. The Concord Fault is a creeping fault and small to moderate earthquakes are possible along the fault, with the capability of a 7.0 magnitude. In addition, the Greenville Fault is classified as a Type B Fault and is located within 2 kilometers of the

project site. The project site is located in Seismic Zone 4, which is defined in the California Building Code as a region nearest historically active faults.

A potential seismic hazard resulting from a nearby moderate to major earthquake is ground shaking. An earthquake of moderate magnitude generated within the San Francisco Bay area, similar to those that have occurred in the past, could cause considerable ground shaking at the site. In order to mitigate the shaking effects, all structures will be designed using sound engineering judgment and the current Uniform Building Code (UBC) requirements. The proposed structures will also be designed in accordance with local codes, which would ensure that seismic events do not adversely affect structures. Therefore, seismic activity would have a *less-than-significant* impact on the proposed project.

**aiii-iv. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, liquefaction and landslides? ..... Less-Than-Significant Impact**

**b. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? ..... Less-Than-Significant With Mitigation Incorporated**

Discussion (aiii-iv. and b.)

A Stream Assessment for the portion of Mitchell Creek west of the proposed project site was prepared by Balance Hydrologics on April 21, 2008 to assess the characteristics and condition of the stream bed and banks, and identify concerns or impacts that may occur with respect to the project's proposed improvements.

The proposed project is located along Mitchell Creek approximately 320 feet upstream from the culvert beneath Clayton Road at the Oak Street intersection. A dilapidated wooden wall currently exists behind the project lots, with an undercut horizontal slab of grouted rip rap extending out a few feet from the base of one of the wall sections. The portion of the bank behind the upstream half of the existing upstream reach is heavily vegetated, while only isolated clusters of trees are presently established along the remaining portion of the project reach. No trees are established on the bank opposite of the proposed project, although a few occur on the top of the floodplain/terrace surface. The assessment determined the stream has been downcutting and eroding into the banks of the project site over the last 10 years or more. In addition, the report affirms the likelihood that the creek would continue to down cut and erode the banks near the project site. The report includes several recommendations to minimize future erosion and protection of project structures. The long-term recommendations include anchoring the footings of the building to bedrock or construction of a subterranean retaining wall between the existing bank and the building foundation. In addition, the report recommends near-term measures to minimize erosion, including the planting of riparian trees along the bank behind the project site or re-establishment of the

bank and bend curvature with reinforcement using a vegetated crib wall or anchoring. It should be noted that the Landscape Plan includes planting of riparian trees along the creek, as recommended in the Stream Assessment and shown in **Exhibit 4**. Therefore, without proper erosion control or implementation of necessary long-term engineering erosion prevention methods, a *potentially significant* impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would ensure the impact is *less-than-significant*.

***Mitigation Measure 7.** Prior to the approval of ~~improvement~~ building foundation plans, the plans shall indicate the anchoring of project structures to the bedrock or the construction of a subterranean retaining wall, for review and approval ~~of~~ by the City Engineer, project soils engineer and the County Building Department.*

**c. Would the project result in substantial soil erosion or the loss of topsoil? .. Less-Than-Significant With Mitigation Incorporated**

Discussion

Construction of the proposed project would involve the disturbance and relocation of topsoils, rendering earth surfaces susceptible to erosion from wind and water. Soil erosion, or the loss of topsoil, resulting from grading and excavation of the project site would be considered a *potentially significant* impact.

Mitigation Measure(s)

Implementation of the following mitigation measure would ensure the impact is *less-than-significant*.

***Mitigation Measure 8.** Prior to issuance of a grading permit, the Developer shall submit, for the review and approval of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:*

- *Hydro-seeding;*
- *Placement of erosion control measures within drainageways and ahead of drop inlets;*
- *The temporary lining (during construction activities) of drop inlets with “filter fabric”;*
- *The placement of straw wattles along slope contours;*
- *Use of a designated equipment and vehicle “wash-out” location;*
- *Use of siltation fences;*
- *Use of on-site rock/gravel road at construction access points; and*
- *Use of sediment basins and dust palliatives.*

- d. **Would the project be located on expansive soil, as defined in the Uniform Building Code? ..... Less-Than-Significant Impact**

Discussion

Expansive soils shrink and swell as a result of moisture changes. This can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Nearby sites contain 5.5 to 10 feet of hard, dark red-brown gravelly sandy clay and that the near surface layer is stiff to hard and ranges in plasticity from moderate to highly plastic. The possibility exists that expansive soils could adversely impact the project. However, consistent with the City's standard procedures, the developer will submit a grading plan, which will incorporate applicable consistent with the Uniform Building Code requirements. Therefore, a *less-than-significant* impact would result.

- e. **Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ..... No Impact**

Discussion

The proposed residences would be connected to the City of Clayton's sewer system and would not require the installation or use of septic tanks. Therefore, the proposed project would have *no impact* on soils supporting septic systems.

**78. HAZARDS AND HAZARDOUS MATERIALS.**

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
e. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
f. Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>

**a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**  
 ..... **Less-Than-Significant With Mitigation Incorporated**

**b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?** .....  
 ..... **Less-Than-Significant With Mitigation Incorporated**

**c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?** .....  
 ..... **Less-Than-Significant With Mitigation Incorporated**

Discussion (a., b., and c.)

The existing retail and commercial offices on the project site were constructed around the time of the federal government's ban on asbestos circa 1989. Therefore, the potential exists for asbestos-containing materials to have been used in constructing the commercial and office buildings. Asbestos-containing materials can include: resilient floor coverings, drywall joint compounds, acoustic ceiling tiles, piping insulation, electrical insulation, and fireproofing materials.

Exposure to lead from older vintage paint is typically possible when the paint is in poor condition or is being removed. In construction settings, workers could be exposed to airborne lead during renovation, maintenance, or removal work. Lead-based paints were phased out of production in the early 1970s. Given the construction date of the on-site structures, lead-based paint is not anticipated to be present.

Although unlikely, other subsurface features may be present and unearthed during project construction. Exposure of demolition and construction workers to asbestos materials and/or other currently unknown substances/structures on the project site is considered to be a *potentially significant* impact.

Mitigation Measure

Implementation of the following mitigation measure would mitigate potential impacts to a *less-than-significant* level:

***Mitigation Measure 9.*** *Prior to issuance of a demolition permit by the City for any on-site structures, the Developer shall provide a site assessment, which determines whether any structures to be demolished contain asbestos. If any structures contain these materials or any other hazardous materials, the Developer shall submit an abatement plan consistent with local, state, and federal standards, subject to approval of the Contra Costa County Building Inspection Department. In addition, the site assessment shall include a site inspection and records review to determine the historic uses of the property, and whether any hazardous substances release(s) have occurred. If the assessment detects the presence of contaminated soils, a remediation plan consistent with local, state, and federal standards, shall be submitted for approval by the Contra Costa County Environmental Health Department The abatement and remediation plan(s) shall identify the necessary measures that the applicant must comply with to fully remove any existing on-site hazards to the satisfaction of the Contra Costa County Environmental Health Department.*

- d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to G.C. Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ..... No Impact**

Discussion

The proposed project site is not located on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in *no impact*.

- e. **Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ..... No Impact**

Discussion

Development of the project site would not interfere with an adopted emergency response plan or emergency evacuation plan. Construction vehicles would be located onsite and therefore, not impede the flow of traffic along either High Street or Oak Street. Accordingly, *no impact* would occur.

- f. **Would the project expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? .....Less-Than-Significant**

Discussion

The project site is bordered by Mitchell Creek to the west and by urban development to the east, south, and north. The likelihood of wildfires in the project area is not significant. Therefore, wildfires would have a *less-than-significant* on the proposed project.

**89. HYDROLOGY.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
b.	Otherwise substantially degrade water quality?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
c.	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 (i.e., 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)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d.	Substantially alter the existing drainage pattern of the site or area, including alteration of the course of a stream, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
e.	Substantially alter the existing drainage pattern of the site or area, including alteration of the course of a stream, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
f.	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?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
g.	Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
h.	Place within a 100-year floodplain structures which would impede or redirect flood flows?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

**a. Would the project violate any water quality standards or waste discharge requirements? .....  
 ..... Less-Than-Significant With Mitigation Incorporated**

**b. Would the project otherwise substantially degrade water quality? .....  
 ..... Less-Than-Significant With Mitigation Incorporated**

Discussion (a. and b.)

The development of the project site would involve potential erosion and discharge of sediment and/or urban pollutants into project stormwater runoff, which could adversely affect downstream water quality.

On March 10, 2003, the State Water Resources Control Board began regulating all

stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. Performance Standard NDCC-13 of the City's NPDES permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits.

In addition, the San Francisco Bay Regional Water Quality Control Board (RWQCB) issued an Order requiring all municipalities within Contra Costa County (and the County itself) to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide National Pollution Discharge Elimination System (NPDES) permit. Known as the "C.3 Standards," new development or redevelopment projects that disturb one or more acres of land area must contain and treat stormwater runoff from the site. Formerly, the threshold was five or more acres of land disturbance. Enhanced Best Management Practices (BMP) to protect stormwater runoff from development sites are also required under the C.3 Standards since February 15, 2005, for projects creating 1 acre of new or redevelopment impervious area. Beginning August 2006, the threshold decreased to 10,000 square feet impervious area. The project would create and/or improve approximately 15,481~~614~~ square feet of impervious surface area, and would therefore be subject to C.3 requirements. As a result, a Stormwater Control Plan (see Appendix B) has been prepared for the project to address how the project would satisfy the C.3 requirements- which have the following design objectives:

- Design the site to minimize imperviousness, detain runoff, and infiltrate runoff where feasible
- Cover or control sources of stormwater pollutants
- Treat runoff prior to discharge from the site
- Ensure runoff does not exceed pre-project peaks and durations
- Maintain treatment and flow-control facilities

As indicated in the Plan, infiltration planters will be incorporated into the site design in order to meet C.3 requirements and minimize the quantity of pollutants that enter the storm drainage system. Although the existing soils do not meet the infiltration rate, material will be imported to be placed in the infiltration planters. A typical infiltration planter presented in the Contra Costa County Stormwater C.3 Guidebook removes pollutants through a combination of overland flow through vegetation, surface detention, and filtration through the soil. For the project, a perforated underdrain pipe will be used under planters instead of infiltration of runoff into native soil because the underlying soil at the site has a slow infiltration rate of 0.06 to 0.20 inches per hour.

The California Stormwater Quality Association has documented that the most efficient and economical best management practices are directed toward small, frequent events that over time produce more total runoff than the larger, infrequent storms used for design of drainage and flood control facilities. The Contra Costa Clean Water Program Stormwater C.3 Guidebook recommends capture and infiltration or treatment of the flow produced by runoff resulting from a rain equivalent to 0.2 inches per hour.

The Stormwater C.3 Guidebook recommends a 0.05 sizing factor for infiltration planters based on amount of impervious rainfall. The impervious areas of the site, including roofs,

parking areas, streets and driveways have been divided into distinct drainage areas as shown on the Storm Water Control Plan Exhibit in the Plan (see Appendix B). Runoff from each of these impervious areas is managed by routing storm water to the infiltration planters to treat the runoff. The runoff from the building roofs and private paved areas will be discharged to ~~planters which direct runoff to infiltration planters located as shown on the Storm Water Treatment Plan Exhibit. Four planters will be constructed on-site, including a 199 square foot above-grade planter and a 55 square foot at-grade planter at the southeast corner of the proposed mixed-use building, a 241 square foot at-grade planter along the Oak Street frontage, and a sump located just north of the proposed trash enclosure for the project, and the runoff would then be pumped to an infiltration planter located on the City-owned parcel west of the creek. While this infiltration planter will have a minimum 18-inch depth of sandy loam with a minimum infiltration rate of 5 inches per hour, and a 6-inch perforated underdrain pipe, the design also includes an overflow catch basin connected to an underground overflow pipe, that would, in certain storm events, discharge excess runoff overland through vegetated/grassy swales prior to entering downstream Mitchell Creek. In contrast, under current site conditions, after any on-site infiltration, stormwater that does not further penetrate into the site soils eventually gets collected in the City's storm drain system and conveyed into Mitchell Creek without any further treatment.~~

An additional 343 60 square foot at-grade planter would be located north of the proposed mixed-use building and would collect runoff from Drainage Management Area (DMA) 8, as shown on the Storm Water Control Plan (see Appendix B). There currently exists a public storm drain pipe in the Oak Street right-of-way; however, the shallow depth of the system precludes it from being utilized for the project. The project's system will connect to this system at three locations.

Without the incorporation of applicable Best Management Practices, such as listed in the Stormwater Control Plan prepared for the project, the project would have a ***potentially significant*** impact on receiving water quality.

#### Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the impacts to a *less-than-significant* level.

***Mitigation Measure 10.*** ~~Prior to the issuance of building permits, the developer shall obtain and comply with the NPDES general permit including the submittal of a Notice of Intent and associated fee to the State Water Resources Control Board and the preparation of a Storm Water Pollution Prevention Control Plan that includes both construction stage and permanent storm water pollution prevention practices to be submitted to the City Engineer for review.~~

***Mitigation Measure 11.*** All project contractors shall conform to the requirements of the “Best Management Practices for Construction Sites” required by the City, including detention and/or filter materials to preclude an increase in water quantity and quality impacts from debris and sediments entering the stormwater system over “pre-development” conditions.” The BMPs shall be

*included in the construction contracts for the review and approval of the City Engineer.*

- c. **Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? ..... Less-Than-Significant Impact**

Discussion

The Contra Costa Water District (CCWD) provides domestic water service to Clayton. The major sources of water are the Sacramento River and the Sacramento River via the Contra Costa Water District Canal, not pumped groundwater. With the construction of a two-story mixed use building the project would result in a net increase in impervious surfaces; however, the surface area would not be large enough to significantly affect groundwater recharge, and the existing site soils are largely impermeable. Therefore, the project would have a *less-than-significant* impact to groundwater resource supply and/or recharge.

- d. **Would the project substantially alter the existing drainage pattern of the site or area, including alteration of the course of a stream, in a manner which would result in substantial erosion or siltation on- or off-site? ..... Less-Than-Significant With Mitigation Incorporated**

- e. **Would the project substantially alter the existing drainage pattern of the site or area, including alteration of the course of a stream, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? ..... Less-Than-Significant With Mitigation Incorporated**

- f. **Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? ..... Less-Than-Significant With Mitigation Incorporated**

Discussion (d., e., and f.)

The proposed project includes the construction of seven residential units above approximately ~~7,000~~200 sq ft of retail on a site that currently contains three structures that will be removed. In total the project would create or improve approximately ~~15,481~~614 sq ft of impervious surfaces on the site. The project includes two infiltration planters -- the main

planter is located on the west side of Mitchell Creek and is approximately 800 square feet. This infiltration planter would receive the majority of the site's runoff. The second infiltration planter is located north and south of the proposed building that and would filter stormwater and drain below to pipes connected to the existing 12-inch storm drain pipe located in Oak Street to accommodate the 10-year flood. A third infiltration planter in the northern portion of the site would also connect to the existing drain line in Oak Street. The Oak Street drain would have sufficient capacity to serve the proposed project drainage demands from DMA 8. However, since other details have not been provided regarding the proposed storm drain system, such as confirming the party(ies) responsible for the long-term maintenance of the system, a **potentially significant** impact would result.

#### Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the impacts to a **less-than-significant** level.

**Mitigation Measure 12.** *The project applicant shall commit the future property owners to fully fund the construction and perpetual maintenance of the storm drain system, including monitoring of the storm drain facilities. The funding mechanism shall be acceptable to the City and shall address costs for capital replacement, inflation, and administration. This shall include the preparation of an Operation and Maintenance Plan (OMP) consistent with the model proposed by the Contra Costa Clean Water Program. Any related review or administrative fees resulting from the OMP shall be the responsibility of the property owner. The OMP will “run with the land” and be enforceable on subsequent property owners of all residential and commercial lots. Maintenance activities may include but not be limited to:*

- *Inspect planters for channels, exposure of soils, or other evidence of erosion. Clear any obstructions and remove any accumulation of sediment. Soils and plantings must be maintained.*
- *Inspect planters regularly and after storms.*
- *Observe soil at the bottom of the planters or filter for uniform percolation throughout. If portions of the planter or filter do not drain within 48 hours after the end of a storm, the soil should be tilled and replanted. Remove any debris or accumulations of sediment.*
- *Examine the vegetation to insure that it is healthy and dense enough to provide filtering and to protect soils from erosion. Replenish mulch as necessary, remove fallen leaves and debris, prune large shrubs or trees and mow turf areas. Confirm that irrigation is adequate and not excessive. Replace dead plants and remove invasive vegetation.*
- *Abate any potential vectors by filling holes in the ground in and around the planters and by insuring that there are no areas where water stands longer than 48 hours following the storm. If mosquito larvae are present and persistent, contact the Contra Costa County Vector Control District for information and advice. Only a licensed*

*individual or contractor should apply Mosquito larvicides only when absolutely necessary and then.*

- *Trash enclosure areas to be routinely inspected, cleared of debris, and thoroughly cleaned every three months, or as required in the City's NPDES permit.*
- *All inlets to be inspected for debris twice a year, with one of those inspections held on October 1st.*
- *Planters should be checked for plant and landscape health. They should also be checked for removable amounts of silt. The landscape and planter soils should also be checked for aeration.*

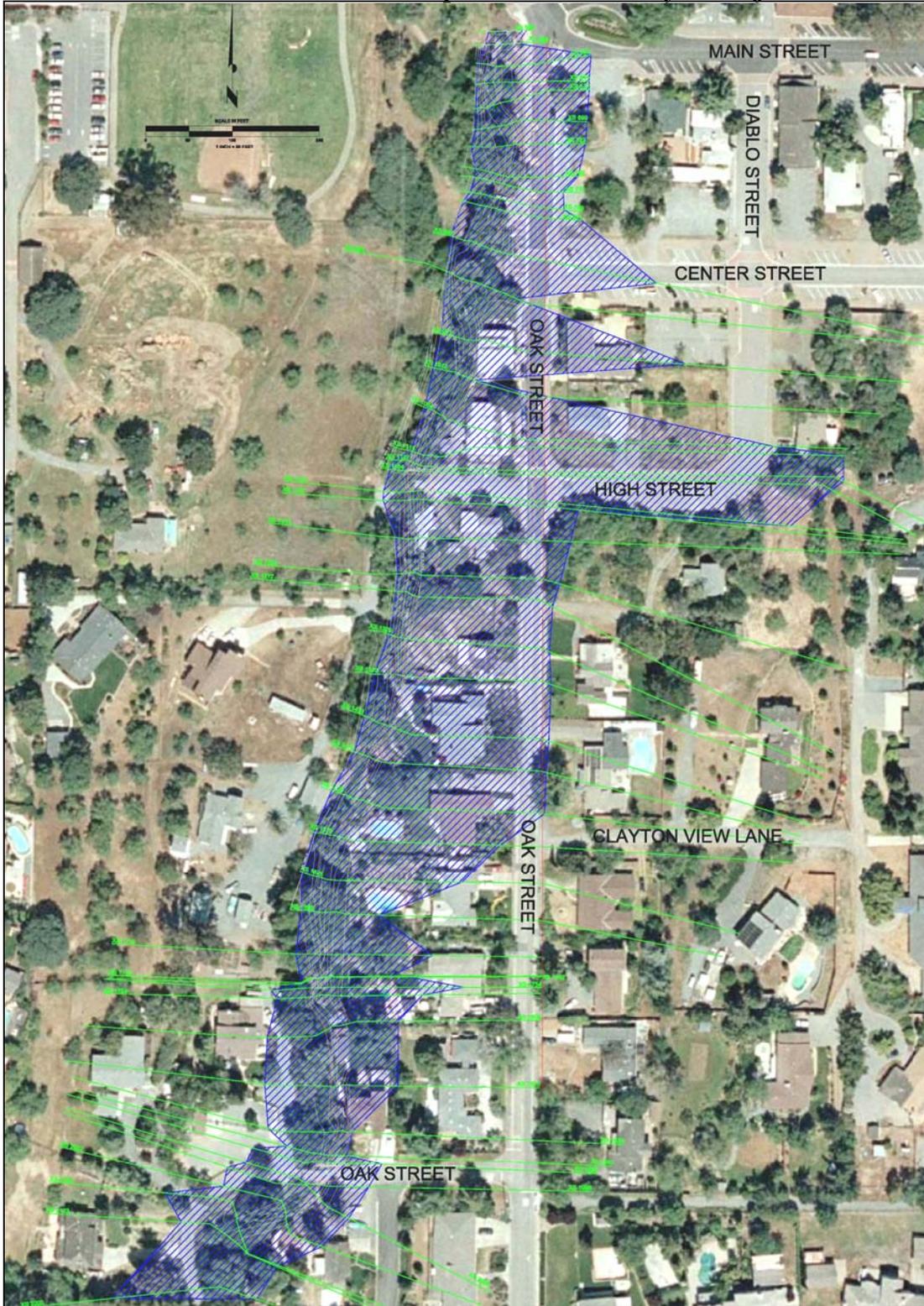
**Mitigation Measure 13.** *All lots shall include deed restrictions, which provide City and other public agency personnel with the right of access to inspect all on-site stormwater control devices. The language in the deed shall be reviewed and approved by the City Engineer and City Attorney.*

- g. Would the project place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? .....  
..... Less-Than-Significant With Mitigation Incorporated**
- h. Would the project place within a 100-year floodplain structures which would impede or redirect flood flows? ..... Less-Than-Significant With Mitigation Incorporated**
- i. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?.....  
..... Less-Than-Significant With Mitigation Incorporated**

Discussion (g., h., and i.)

The City retained Balance Hydrologics to determine the extent of the 100-year floodplain along the portion of Mitchell Creek adjacent to the project site. Mitchell Creek is a tributary of Diablo Creek, and joins Mount Diablo Creek north of the Clayton Town Center. Mount Diablo Creek is the principal drainage running through Clayton (see **Exhibit 56**).

**Exhibit 56**  
**Mitchell Creek 100-Year Floodplain within Vicinity of Project Site**



Flooding has occurred from Mount Diablo Creek in the Town Center area and in the floodplain between Clayton Road and Kirker Pass Road. The major floods affecting this area occurred in 1938, 1952, 1955, and 1963. Despite these occurrences, Mount Diablo Creek is not considered a creek with a high flood history. Part of the reason for this is due to the long floodplain between Mount Diablo slopes and the City limits that serves to slow down velocity and delay peak flows. The watershed area of Mitchell Creek at the project site is 4.5 square miles, an estimate that was verified previously in an analysis conducted by Balance Hydrologics in January 2008. The flood flows listed in the FEMA Flood Insurance Study for the creek at the project site are 1,090, 1,630 and 1,810 cfs for the 10-, 50-, and 100-year storm events, respectively. These storms can also be referred to as the 10-, 2-, and 1 percent chance annual storms. The 100-year flood boundary shown on the FEMA Flood Insurance Rate Map (FIRM) for the City of Clayton extends across Oak Street, indicating that the project lots are within the 100-year special flood hazard area. The 100-year flood elevations appear to range from 399 to 395 at the project site based on the FIRM map. Therefore, development of the proposed project would place housing, although on a second floor, in a 100-year floodplain.

In order to address this situation, the applicant has included in the project design a system of steel glass barriers or floodgates that would protect the building from flooding. Because the project would be within the 100-year floodplain, a ***potentially significant*** impact would result if the necessary flood-proofing measures are not implemented.

#### Mitigation Measures

Implementation of the following mitigation measure would reduce the impacts to a *less-than-significant* level.

***Mitigation Measure 14.*** *The developer shall provide for flood proofing of those portions of the building below one-foot above the 100-year flood surface elevation. The method of flood proofing shall include operating procedures and be subject to the approval of the City's Floodplain Administrator.*

**910. LAND USE.**

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating on environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. Would the project physically divide an established community? ..... No Impact**

Discussion

The project site is surrounded by existing single-family residences to the south and southeast, as well as a nine home single family development recently completed to southeast, known as Mitchell Creek Place. A mixed-use commercial/office development is located northeast and existing commercial uses to the east. Vacant land is located to the north and west. The proposed project is part of the *Town Center Specific Plan*, is consistent with the site’s current PD zoning, Town Center Commercial, and Public Park/Open Space/Open Space and Recreation land use designation, and would provide important uses intended for the Town Center area. As a result, the proposed project would not divide an established community, resulting in *no impact*.

- b. Would the project conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating on environmental effect? ..... Less-Than-Significant Impact**

Discussion

The proposed project is consistent with the current *General Plan* and *Town Center Specific Plan* land use designations for the site, which are Town Center (TC) and Public Park/Open Space/Open Space and Recreation (PU). The TC designation allows for a variety of retail sales and services, offices, assembly uses, temporary season outdoor uses, and a mixture of office and retail and second story residential. The area west of Mitchell Creek is to have a conservation easement recorded across it and will remain undeveloped. The project would therefore be consistent with the existing land use designations. The development area is zoned PD and would be required to follow all Planned Development regulations in the Zoning Ordinance. The area west of Mitchell Creek is zoned Public Facility and would

remain undeveloped given the conservation easement, with the exception of the proposed 800 square foot infiltration planter for the project.

The project has also been carefully reviewed to ensure consistency with applicable *Town Center Specific Plan* policies and design standards. Therefore, the proposed project would not conflict with the policies in the *General Plan*, *Specific Plan*, or zoning designations or regulations and would have a ***less-than-significant*** impact on the applicable land use plans and regulations.

**c. Would the project conflict with any applicable habitat conservation plan or natural communities conservation plan? ..... Less-Than-Significant Impact**

Discussion

The proposed project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved conservation plan. The East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) was recently adopted by the participating agencies, and became effective in the City of Clayton in January 2008. The HCP/NCCP is intended to provide a coordinated, regional approach to special-status species conservation and development regulation. A total of 28 species are covered under the HCP/NCCP, including California red-legged frog, California tiger salamander, Alameda whipsnake, San Joaquin kit fox, vernal pool tadpole shrimp, and burrowing owl, among others. The HCP/NCCP provides streamlined permits from the U.S. Fish and Wildlife Service (USFWS) and CDFG for covered species for new urban development projects and a variety of public infrastructure projects. The goal is to eventually provide coverage for agency authorizations for wetland-related impacts, but these are currently not covered under the HCP/NCCP.

Although the City of Clayton is a participating agency and the project site is located within the HCP/NCCP boundaries, the proposed project is exempt because the project site is identified as an Urban land cover type in the HCP/NCCP. Because the project is exempt as a regulated development project under the HCP/NCCP, conformance with the adopted plan is not required, no impacts are anticipated, and no fees would be assessed. However, the project has been designed to avoid possible inadvertent take of special-status species, minimize disturbance to the Mitchell Creek corridor, and restore and enhance existing habitat along the creek corridor, which would be consistent with the general goals of the HCP/NCCP. Therefore, the project would not conflict with the HCP/NCCP and result in a ***less-than-significant*** impact.

**1011. MINERAL RESOURCES.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

- a. **Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? ..... No Impact**
- 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 Impact**

Discussion (a. and b.)

The *Contra Costa County General Plan* states (p. 8-52) that the most important mineral resources that are mined in the County include crushed rock near Mt. Zion, west of Mitchell Canyon Road (approximately 0.7 miles southwest of the project site); shale in the Port Costa area; and sand and sandstone deposits, mined from several other, distant locations.

Since the project site is not within the immediate vicinity of the Mt. Zion quarry or any other of the identified areas of important mineral deposits, the project would not interfere with existing operations or access to these deposits. Therefore, the proposed project would have *no impact* to mineral resources.

**1112. NOISE.**

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project result in:</i>				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
c. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

**a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ..... Less-Than-Significant Impact**

**b. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? ..... Less-Than-Significant Impact**

Discussion (a. and b.)

The proposed project involves the construction and occupancy of approximately 7,000~~200~~200 sq. ft of retail and seven residential units on a site currently occupied by two commercial buildings and one garage. Single family residences border the site to the south and southeast.

The *General Plan* (p. VIII-2) includes the following goal regarding noise:

“To maintain or improve the overall environment and the general well being of the community by reducing annoying levels of noise for all land uses in the city. Physically harmful levels of noise (70 Ldn and above) shall be mitigated to below harmful levels and to levels of minimum annoyance (below 60 Ldn) where feasible.”

Exhibit VIII-1 of the Noise Element of *General Plan* (Projected Noise Contours) does not identify the project site as subject to significant exterior noise exposure. Moreover, the proposed project does not fall within any of the noise contours shown in Exhibit VIII-3, Noise Contours. Only major roads in Clayton have substantial noise contours; these include Clayton Road and Marsh Creek Road. These roads are not adjacent to the project site. Furthermore, the residences proposed for the project do not include rear yards or patios

adjacent to Oak Street or High Street. Therefore, noise-sensitive activity would only occur indoors. Since standard building construction typically reduces exterior noise levels by 15 dB, the noise levels experienced inside project residences would be within the acceptable range of 45 Ldn.

An analysis of the noise impacts associated with any new project need also consider the effect that the project would have on surrounding uses. The proposed project is adjacent to potentially noise sensitive uses, including the single family residences located to the east, south, and southwest, and the Mitchell Creek subdivision to the southeast. The project would add a minor amount of traffic to the local roadway network, which in turn, would result in a permanent increase in the ambient noise environment. Whether or not this increase is considered significant is a function of the amount of traffic generated by this project relative to projected traffic volumes without the project.

California Environmental Quality Act (CEQA) Guidelines define a project-level impact as being significant if it “increases substantially the ambient noise levels for adjoining areas.” In practice, significant noise impacts are usually identified in CEQA analyses if the project would result in a perceptible ambient noise level increase, commonly considered to be 3 dB.

The net addition of seven residences and their associated vehicle trips would be a relatively small amount of new vehicle trips on the local roadway network. The permanent traffic noise level increase resulting from this project therefore would be below the 3 dB threshold of significance for this project, and the impact is considered *less-than-significant*.

- c. **Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? ..... Less-Than-Significant Impact**
  
- d. **A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? ..... Less-Than-Significant Impact**

Discussion (c. and d.)

Construction of the project would result in temporary increases in groundborne vibration and noise levels from demolition, grading, and construction activities on the project site. Such noise would include mechanical equipment used to demolish the existing retail and office buildings on the site and the removal of debris. Earthmovers, dump trucks, and similar equipment would be used to grade the site, which would also generate potentially significant noise levels. After grading is complete, construction noise would include delivery of construction materials, construction of foundations, framing, roofing, and similar operations that would temporarily generate noise. All construction would be conducted in accordance with Chapter 15.01 of the *Municipal Code* which restricts construction activities to the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, unless otherwise authorized by the City Engineer. Construction related impacts would be short-term in nature and would be reduced to a *less-than-significant* level through adherence to the *Municipal Code* regulations regarding the days and hours of construction activity.

**1213. POPULATION AND HOUSING.**

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>

- a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)? ..... Less-Than-Significant Impact**

Discussion

An impact to population and housing is considered significant if the project would induce substantial population growth in an area either directly or indirectly. The proposed project involves the construction of seven new residential units. The proposed project is consistent with the type and intensity of development identified for the project site in the *General Plan* and *Town Center Specific Plan*, and would not create substantial population growth in the area. In addition, the infrastructure planned to serve the proposed project is designed to provide services for the project only. The area surrounding the project site consists of existing development and the project is therefore considered an infill development. Therefore, a *less-than-significant* impact would occur in regards to the project increasing substantial population growth in an area that has not been previously anticipated for such growth.

- b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? ..... No Impact**
- c. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ..... No Impact**

Discussion (b. and c.)

Two commercial buildings and an associated garage currently exist on the project site, and development of the proposed project would involve the demolition and removal of the buildings. The project would result in a gain of seven residential units. Therefore, approval and implementation of the proposed project would neither displace substantial existing housing nor necessitate the construction of replacement housing, and the project would result in *no impact*.

**1314. PUBLIC SERVICES.**

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>				
a. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
d. Parks and recreation?	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>
e. Public landscaping?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
f. Solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
g. Other public facilities and services?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

- a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection? ..... Less-Than-Significant Impact**

Discussion

The project site is served by Station 11 of the Contra Costa County Fire Protection District located at Center Street and Clayton Road which is approximately 0.4 miles from the project site. The station has a Type I engine. In addition, the station has three staff on a 24-hour, 7 days per week basis. Station 11 would be expected to have adequate response times to the project site. In addition, the project would be constructed in accordance with applicable building, fire, and life safety codes. As a result, the project would have a *less-than-significant* on fire protection resources.

- b. Police protection? ..... Less-Than-Significant With Mitigation Incorporated**

Discussion

Development of the project would increase calls for police service, based on the construction phase and an increase in on-site population and improvements. According to the Clayton Police Chief, the Police Department staffing levels have not kept pace with recent population increases in the community; therefore, development of the Project could have a *potentially significant* impact.

Mitigation Measure

Implementation of the following mitigation measure would reduce the impact to a *less-than-significant* level.

**Mitigation Measure 15.** *The Project developer shall pay a fair share contribution to the City of Clayton for impacts to police staffing directly related to impacts of the Rivulet Creekside Terrace project for a five-year period. The calculation and payment shall be made at the time of issuance of building permit for each of the Project’s units (including residential and commercial units) and shall be approved in advance by the Clayton Police Chief and City Manager.*

The fair share contribution methodology is listed below with *exemplary* numbers:

Current Sworn Officer / Dwelling Unit Ratio

11 Sworn Officers / 3,984 Dwelling Units\* = 1 Sworn Officer / 362.2 Dwelling Units

Project Impacts on Police Service (5 Year Period)

7 Net New Dwelling Units x (1 Sworn Officer / 362.2 Dwelling Units) = 0.019 Sworn Officer

0.019 Sworn Officer x \$119,491/year total compensation = \$2,307/year

5 years x \$2,307/year = \$11,535 cost to City

\* Per State Department of Finance, 2007.

**c. Schools?..... Less-Than-Significant Impact**

Discussion

The City of Clayton is located within the Mt. Diablo Unified School District. Schools that serve children from Clayton are the Mount Diablo Elementary School, Diablo View Middle School, and Clayton Valley High School. The proposed project could add students to the Mount Diablo Unified School District. Under State law, payment of school impact fees prior to the issuance of a building permit constitutes full mitigation for any impacts to school facilities. Therefore, the proposed project would have a *less-than-significant* impact on schools.

**d. Parks and recreation? ..... Less-Than-Significant Impact**

Discussion

The proposed project does not contain on-site parks or recreational facilities. Mount Diablo State Park is located approximately one mile south of the project site. Furthermore, the City owns and maintains several parks including Clayton Community Park and Lydia Lane Park. The Downtown Park is located three blocks northeast of the project site. The City also owns and maintains an extensive system of pedestrian and recreational trails throughout the community, many which link with regional trails.

The *Zoning Ordinance* 17.28.100 requires projects on parcels less than once acre in PD Districts with mixed uses to set aside 10 percent of the project site as open space. In lieu of on-site open space, the applicant may acquire land for public open space at off-site locations or provide financial contributions. Financial contributions may be made for acquisition of active open space and/or maintenance of active recreation areas in the City’s Park system and for passive open space contributions for maintenance of the City’s trail system. In addition, perpetual maintenance is to be provided for the open space area by a property owners association or property owner, and for financial maintenance contributions the fees are based upon costs for a 10 year period. The proposed project site is comprised of 37,639 sq ft and would be required to provide 3,764 sq ft of active open space. The proposed project includes the construction of 453 sq ft of outdoor private deck, 751 sq ft of outdoor common deck, and ~~355~~35 sq ft of mini interpretive area. The total active open space provided would be 1,5539 sq ft, which is 2,225 sq ft less than required. The parcel west of Mitchell Creek would be maintained as an open area covered by a conservation easement, with the exception of the proposed 800 square foot infiltration planter for the project. ~~;~~ Therefore, City staff would recommend that the requirement is satisfied by the applicant’s proposed on-going maintenance of the parcel west of Mitchell Creek and the terminus of Center Street, plus other areas described above. However, without assurances of the conservation easement and maintenance, the project would result in a *potentially significant* impact.

Mitigation Measure

Implementation of the following mitigation measure would reduce the impact to a *less-than-significant* level.

***Mitigation Measure 16.*** *The Project developer shall agree to the recordation of a conservation easement on the third parcel located west of Mitchell Creek, and shall assume full responsibility for the ongoing maintenance and upkeep of the parcel as well as the terminus of Center Street. The conservation easement shall preclude future development of said parcel while still allowing limited improvements, such as the proposed infiltration planter associated with the Creekside Terrace project.*

**e. Public landscaping? ..... No Impact**

Discussion

The preliminary landscaping plan indicates that the infiltration planters at the back of the sidewalk would be included in the Oak Street public right-of-way. The preliminary landscape plan shows a single tree within the Oak Street parking area. Additionally, the area associated with the terminus of Center Street, including the interpretive area, would be planted and maintained by the building owner or property manager. As a result, the project will have *no impact* on maintenance landscaping along public right-of-ways.

**f. Solid waste? ..... Less-Than-Significant Impact**

Discussion

Solid waste would be collected by Allied Waste Services. The Keller Canyon Landfill is anticipated to have adequate capacity for 30 to 35 years. The City is required by AB 939 to

ensure that it achieves and maintains the diversion and recycling mandates of the State. The project includes demolition of the existing buildings and infrastructure; additionally, new construction would have left over materials from woodcutting, concrete pours, pipe work etc. In accordance with the construction and demolition debris recycling requirements of the *Clayton Municipal Code* (Chapter 15.80), the project developer must prepare a waste management plan for City review and approval for both demolition and new construction. The waste management plan must address all materials that would not be acceptable for disposal in the sanitary landfill. At least 50 percent of the construction and demolition debris must be diverted from the landfill and made available for salvage, reuse, and/or recycling. Documentation of the material type, amount, where taken and receipts for verification and certification statements are included in the waste management plan.

The project developer must also submit a performance deposit to ensure compliance with the waste management plan and cover staff costs related to the review, monitoring and enforcement of the plan. The project applicant must also provide appropriate space for permanent residential and commercial recycling receptacles, which the applicant has proposed to locate within the guest parking area along High Street. In a letter to the City from Allied Waste Management, dated April 14, 2010, the Clayton Area Route Supervisor stated his opinion that the enclosures depicted on the plans appear to be adequate to service the waste, recycling and green requirements for the proposed project.

On the basis of the *Municipal Code* requirements for waste management plans and preliminary feedback from the waste provider that the project has been adequately designed to accommodate service vehicles, implementation of the proposed project would result in a *less-than-significant* impact.

**g. Other public facilities and services? ..... Less-Than-Significant Impact**

Discussion

The Project would increase demands for other general governmental services, including libraries and general City maintenance services. However, these demands would be considered minimal for a seven net residential unit project and since payment of user fees or taxes to the appropriate service providers generally off-set any potential impacts to such service providers, these additional demands for other governmental services are a *less-than-significant* impact.

**1415. TRANSPORTATION/CIRCULATION.**

<b>Issues</b>	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
c. Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
e. Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
f. Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

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

**b. Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? ..... Less-Than-Significant Impact**

Discussion (a. and b.)

The project site is located directly south of Center Street and east of Oak Street. Oak Street is a lightly-traveled road which connects the Clayton Town Center area to Clayton Road. High Street runs along the southern edge of the project site.

The proposed project includes the construction of a two-story mixed use building consisting of seven residential units above approximately 7,000~~200~~ sq ft of retail uses. Abrams Associates, Traffic Engineering, prepared a Traffic Impact Study for the project in July 2008.

The existing roadways in the vicinity of the project site include Oak Street, Center Street, Diablo Street, Main Street, and High Street. All downtown intersections are controlled by stop signs and the closest traffic signal is located at the intersection of Clayton Road and Marsh Creek Road. Existing intersection operations were evaluated for the weekday AM and

PM peak hours and were found to operate at an acceptable Level of Service (LOS) A as shown in **Table 45**.

<b>Intersection</b>	<b>Control</b>	<b>Peak Hour</b>	<b>Measure</b>	<b>LOS</b>
Oak Street and Center Street	Stop Sign	AM	4.1 sec/veh	A
		PM	4.3 sec/veh	A
Oak Street and High Street	Stop Sign	AM	7.1 sec/veh	A
		PM	7.0 sec/veh	A
Oak Street and Main Street	Stop Sign	AM	6.9 sec/veh	A
		PM	7.0 sec/veh	A
Center Street and Diablo Street	Stop Sign	AM	5.3 sec/veh	A
		PM	6.3 sec/veh	A
Center Street and Marsh Creek Road	Stop Sign	AM	9.9 sec/veh	A
		PM	9.6 sec/veh	A
Main Street and Marsh Creek Road	Stop Sign	AM	1.4 sec/veh	A
		PM	1.3 sec/veh	A
Clayton Road and Marsh Creek Road	Traffic Signal	AM	V/C = 0.33	A
		PM	V/C = 0.48	A

*Baseline Conditions*

The Baseline Conditions represents traffic conditions that are forecast to exist once already approved projects are completed and occupied. The Baseline Conditions include Existing Conditions and projected approved projects such as Flora Square and Mitchell Creek Place. All study intersections operate at an acceptable LOS during peak hour conditions as shown in **Table 56**.

<b>Intersection</b>	<b>Control</b>	<b>Peak Hour</b>	<b>Measure</b>	<b>LOS</b>
Oak Street and Center Street	Stop Sign	AM	4.2 sec/veh	A
		PM	4.5 sec/veh	A
Oak Street and High Street	Stop Sign	AM	7.1 sec/veh	A
		PM	7.1 sec/veh	A
Oak Street and Main Street	Stop Sign	AM	6.9 sec/veh	A
		PM	7.0 sec/veh	A
Center Street and Diablo Street	Stop Sign	AM	5.7 sec/veh	A
		PM	7.1 sec/veh	A
Center Street and Marsh Creek Road	Stop Sign	AM	10.4 sec/veh	B
		PM	10.0 sec/veh	B
Main Street and Marsh Creek Road	Stop Sign	AM	1.6 sec/veh	A
		PM	1.5 sec/veh	A
Clayton Road and Marsh Creek Road	Traffic Signal	AM	V/C = 0.43	B
		PM	V/C = 0.56	B

*Project Conditions*

Trip generation rates of 9.57 trips for single-family uses and 42.9 trips per 1,000 sq ft of retail uses were used to calculate trip generation. As shown in **Table 67**, the project would generate an additional 36876 trips per day or approximately 334 trips during the peak hour

period. The number of trips is well below the established threshold where a detailed traffic analysis would be required. Generally, an individual signalized intersection would require a minimum of 50 trips per hour before the differences in traffic capacity need to be measured. For this project, the trips would be distributed among several roadways. As a result, the project would not create a substantial increase in the number of vehicle trips to a single roadway. The addition of 36876 vehicle trips would not exceed the maximum daily vehicle capacity for Oak Street or High Street. It should be noted that the estimated trips generated should be considered higher than likely because many of the potential trips to the retail portion of the project could come from existing trips in the area. Normally a 34 percent reduction to the retail trips would be used to account for “pass-by” trips. However, to provide a conservative review of the project trips and to account for other potential tenants, no pass-by reductions were used. As the proposed project would add only 334 trips to the peak hour period, the peak hour trips generated would not result in the degradation of the operations of nearby intersections to unacceptable levels.

**Table 67**  
**ITE Trip Generation**

Land Use	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
General Retail (Trip rate per 1,000 sq ft)	42.9	0.63	0.4	1.03	1.8	1.95	3.75
Trip Generation from project ( <del>7,000</del> 200 sq ft)	<u>3049</u>	<u>45</u>	3	7	13	14	<u>267</u>
Housing – Market Rate (Trip rate per dwelling unit)	9.57	0.19	0.56	0.75	0.64	0.037	1.01
Trip Generation from 7 units	67	1	4	5	4	3	7
<b>Total Project Trips</b>	<b><u>36876</u></b>	<b><u>67</u></b>	<b><u>7</u></b>	<b><u>12</u></b>	<b><u>17</u></b>	<b><u>16</u></b>	<b><u>334</u></b>

*Baseline Plus Project*

The Baseline Plus Project Condition represents traffic conditions that are forecast to exist once already approved projects are completed and occupied. The Baseline Plus Project Conditions include Existing Conditions and projected approved projects such as Flora Square and Mitchell Creek Place as well as the proposed project. In addition, a five percent increase in traffic has been assumed to account for the growth in traffic that has occurred since the last traffic counts were taken. The study intersections would continue to operate an acceptable LOS.

*Cumulative*

The Cumulative (2030) traffic volumes with the addition of traffic from the proposed project have been reviewed at each of the study intersections. All intersections are projected to operate at LOS B or better, as shown **Table 78**. The proposed project traffic would be distributed among the various roadways in the area. In addition, the proposed project does not include a zone change and therefore the project would not be anticipated to generate substantially more traffic than previously anticipated uses.

**Table 78**  
**Cumulative Level of Service Conditions**

Intersection	Control	Peak Hour	Cumulative No Project		Cumulative With Project	
			Measure	LOS	Measure	LOS
Oak Street and Center Street	Stop Sign	AM	4.3 sec/veh	A	4.3 sec/veh	A
		PM	4.7 sec/veh	A	4.7 sec/veh	A
Oak Street and High Street	Stop Sign	AM	7.1 sec/veh	A	7.1 sec/veh	A
		PM	7.1 sec/veh	A	7.1 sec/veh	A
Oak Street and Main Street	Stop Sign	AM	6.9 sec/veh	A	6.9 sec/veh	A
		PM	7.1 sec/veh	A	7.1 sec/veh	A
Center Street and Diablo Street	Stop Sign	AM	6.0 sec/veh	A	6.0 sec/veh	A
		PM	7.9 sec/veh	A	7.9 sec/veh	A
Center Street and Marsh Creek Road	Stop Sign	AM	12.8 sec/veh	B	12.9 sec/veh	B
		PM	11.7 sec/veh	B	12.1 sec/veh	B
Main Street and Marsh Creek Road	Stop Sign on Main Street	AM	1.8 sec/veh	A	1.8 sec/veh	A
		PM	1.6 sec/veh	A	1.6 sec/veh	A
Clayton Road and Marsh Creek Road	Traffic Signal	AM	V/C = 0.48	B	V/C = 0.48	B
		PM	V/C = 0.61	B	V/C = 0.62	B

Conclusion

The proposed project traffic would not adversely increase delay at study intersections or degrade the level of service to an unacceptable level. Therefore, the proposed project would have a *less-than-significant* impact to existing traffic load and street system capacity.

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

Discussion

*Safety*

The project proposes to maintain the existing parallel parking along the frontage on Oak Street, maintaining the on-street parking supply. It should be noted that vehicles back out from the garages or guest spaces onto High Street adjacent to the project. Adequate space has been provided to allow vehicles to maneuver in and out of the guest parking spaces as per standard parking design guidelines. For comparison, the same amount of space is available as would normally be required for a two-way parking aisle with 90 degree parking. It should be noted that approximately four residential units are currently located further to the west on High Street, and under current zoning one additional single-family residential dwelling could be built. Therefore, at buildout an additional one to two trips could occur during the peak hours. Even, under worst case scenario conditions, which would include ten residential units being constructed beyond High Street, traffic conflicts or problems would not occur. Ten residential units would result in a total of about 15 vehicles per hour or one every four minutes. In order to maintain access to properties to the west of the site, High Street would continue to have one lane in each direction with a roadway width of at least 20 feet adjacent to the project.

*Sight Distance*

The presence of parked vehicles along the project frontage would not be considered a problem for the sight distance for vehicles traveling eastbound on High Street. The parking spaces are properly located and should remain in their current configuration (which is not an unusual condition). The potential for landscaping or trees to reduce the sight distance would not be considered a significant impact because City Code Section 12.08.010 prohibits reduced sight distance from occurring. On the project’s corner at Oak Street and High Street all landscaping would be kept below two feet and all trees would be limbed up to at least eight feet. Maintenance of landscaping to City regulations would prevent project impacts from lack of sight distance.

*School Drop-off/Pick-up Activities*

Parents drop-off and pick up students from Mount Diablo Elementary School at Oak Street just north of the project site near Center Street. While the pick-up area is not an official school loading area, the use of this location allows students to access the school without taking a circuitous route around on Clayton Road. The drop-off/pick-up area causes short-term congestion and delays; however, it improves overall traffic operations in the area. The use of the drop-off/pick-up area to the school reduces the number of trips that turn left at Marsh Creek Road onto Clayton Road and left again from Clayton Road onto Mitchell Canyon Road.

Conclusion

The proposed project has been designed such that hazards would not result to vehicles traveling along adjacent streets. In addition, although the project would increase activity in the existing school drop-off/pick-up area north of the project, the project itself would not result in any significant impacts on pedestrian safety at the crossing (it should be noted that a separate analysis of the school crossing on Oak Street will be prepared for the City to lay out the safety improvement options that have been discussed and analyzed for this location). Therefore, a *less-than-significant* impact from the proposed development regarding traffic hazards resulting from design features or incompatible uses.

- d. **Would the project result in inadequate emergency access? ..... No Impact**

Discussion

The proposed project would be accessible to emergency vehicles via High Street and Center Street. Therefore, if one of the roadways becomes blocked or obstructed, an emergency vehicle would have an alternative route, and *no impact* would occur from emergency access.

- e. **Would the project result in inadequate parking capacity? ..... Less-Than-Significant Impact**

Discussion

The City of Clayton Zoning Code requires two off-street parking spaces for each residential unit and one space for each 400 square feet of retail space (without a Town Center Parking waiver) as specified in the Town Center Parking Study. **Table 79** shows the required parking for the project according to City standards and **Table 810** shows the off-street parking

proposed as part of the project. As shown **Table 79**, the project would require 14 off-street spaces for the upper level residential units and approximately 4828 parking spaces for the proposed ground floor retail space. It should be noted that a 75 percent waiver of the City parking standards for the ground floor space is permitted as part of the City’s plan to encourage retail uses in the Town Center area.

Development	Size	Trip Rate	Parking Spaces
General Retail (1 <sup>st</sup> Floor)	7,000 <del>200</del> sq ft	<del>2.5 per ksf</del> <u>1 space for every 250 sf</u>	<u>Approximately 4828</u>
Town Center Parking Waiver (75% reduction)			-1421
Residential	7 units	2 per unit*	14
<b>Total</b>			<b>1821 (with waiver) 342 (without waiver)</b>

\* Note: This includes 1.5 spaces per unit plus 0.5 guest spaces per unit.

Project Component	Parking Spaces
General Retail (1 <sup>st</sup> Floor)	0
Residential (Parking Garages for Residents)	14
Residential (Guest Parking Spaces)	7
<b>Total</b>	<b>21</b>

For comparison, a conservative estimate of the parking demand for the project using data from the ITE Parking Generation Manual was made. As mentioned previously, the project includes 7,000~~200~~ square feet of retail space along with seven residential units. The parking demand estimates in **Table 810** are based on the “General Retail/Shopping Center Land Use” (Category 820) for the first floor, and the residential rate for the seven dwelling units. The calculation is shown in **Table 911**. These parking calculations result in a parking demand for 367 spaces.

Development	Size	Rate per 1,000 sq ft	Parking Spaces
General Retail (1 <sup>st</sup> Floor)	7,000 <del>200</del> sq ft	3.23	<u>223</u>
Residential	7 units	2 per unit	14
<b>Total</b>			<b>367</b>

Due to the location of the project within the Town Center area and effects of shared parking, the parking demand for the project is anticipated to be less than the maximum. For another comparison, the parking from a small mixed-use project of similar size could use a typical parking generation rate of 2.8 spaces per 1,000 sq ft for retail. The City of Walnut Creek requires 3.3 spaces per 1,000 sq ft for all uses in the downtown area. For residential uses about 1.3 spaces per unit is what is normally required for downtown developments. If the

calculation assumes a more urban/downtown setting then the estimated demand would be about 29 parking spaces for the project.

~~The 21 off-street parking spaces being provided for the project's residential units are anticipated to meet the City's parking requirements. However, uUsing the ITE Parking Generation Manual rates, the project's parking space total is anticipated to fall short of the demand by 156 spaces. Based upon the most comparable Walnut Creek parking generation rates, the proposed project would result in an eight parking space deficit. While the Municipal Code does allow commingling of commercial and residential parking spaces (see Section 17.37.060, Reciprocal Parking Facilities), it is impractical to assume that the seven parking spaces on the proposed driveway pads for the project's residential units could be used to support the commercial use. Consequently, the project would be subject to payment of in-lieu parking fees (see Section 17.37.070, In-Lieu Parking Fees). However, it should be noted that Additional parking demand could be readily accommodated by the is available on-street and public parking in the Town Center area without increasing parking occupancy rates more than three percent (based on the existing supply). At build-out the Town Center area is anticipated to have up to 1,100 on-street and public parking spaces available. Although the use of on-street parking would increase on the blocks closest to the project, the vehicles from the proposed project would increase the overall downtown parking occupancy levels by less than 2 percent.~~

#### On-Street Parking Conditions

The City of Clayton currently has about 218 on-street parking spaces in the downtown area. About 110 of these spaces are located within two blocks of the site. The occupancy of the downtown spaces is approximately 65 percent during active times and 80 percent during the busiest weekend evenings. The *Town Center Parking Study* (SAS Planning and Consulting, May 2006) contains a complete inventory.

#### Conclusion

The proposed project would generate a demand for 367 parking spaces and provide 21 parking spaces. ~~Additional off-site parking spaces in the surrounding downtown area are anticipated to satisfy the remaining demand. Sufficient on-site and on-street parking could meet the proposed project parking demands. However, the project is required, per Municipal Code Section 17.37.070, to pay in-lieu parking fees, which would ensure that adequate funds are being collected to provide sufficient long-term parking for development in the Town Center area. Therefore, as the proposed project, the project would have a *less-than-significant* impact would result on parking.~~

- f. **Would the project conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? ..... Less-Than-Significant Impact**

### Discussion

The project area is currently provided transit service by the Central Contra Costa Transit Authority. Bus Route 110 currently provides service within Clayton and in the vicinity of the project site along Clayton Road and old Marsh Creek Road, north and east of the project site. The construction of seven residences and approximately 7,0200 sq ft of retail would not result in the need for expanded bus service in Clayton. Furthermore, the project site's close proximity to the Town Center and associated commercial services could encourage walking and biking by the residents of the proposed project. The sidewalks and street frontage would be completed to the final conditions along the edges of the project. During construction of the project, landscaping and aesthetic features would also be included along the frontage. Therefore, the proposed project would have a *less-than-significant* impact on alternative transportation.

**15. WATER, SEWER, AND STORMWATER SYSTEMS.**

<b>Issues</b>		Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<i>Would the project:</i>					
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c.	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?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
e.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

**a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? ..... Less-Than-Significant Impact**

**b. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? ..... Less-Than-Significant Impact**

Discussion (a. and b.)

The proposed project would generate additional wastewater flows into the regional wastewater treatment plant operated by Central Contra Costa County Sanitary District (CCCSD) located north of Buchanan Field. The wastewater collection system within the City of Clayton is owned by Clayton and maintained by the City of Concord. Concord has a contract with CCCSD to treat the wastewater. The CCCSD treatment plant has a maximum average dry weather flow (adwf) effluent discharge of 53.8 million gallons per day (mgd). The plant's maximum adwf of 53.8 mgd is projected to accommodate buildout until the year 2035. The proposed project would result in a net increase of seven single-family units which would generate approximately 1,575 gallons per day (225 gpd per single family dwelling unit). An increase of the adwf by 1,575 gpd would not be considered an adverse impact to the plant's current capacity because of the relatively small increase in demand and the

remaining available capacity of the WWTP. Therefore, the proposed project would have a *less-than-significant* impact to existing wastewater facilities and infrastructure.

**c. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? ..... Less-Than-Significant Impact**

**d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? ..... Less-Than-Significant Impact**

Discussion (c. and d.)

Potable water service for the project site is required and would be made available by Contra Costa Water District (CCWD) upon completion of financial arrangement and installation of all necessary water facilities to meet the requirements of residential use in accordance with current CCWD standards. The project would be provided with potable water by tying into existing lines.

In addition, the applicant would be required to adhere to State Building Code standards for installation of water-conserving plumbing fixtures and the City water-conserving guidelines for landscaping (Chapter 17.80 of the *Municipal Code*). Therefore, the proposed project would have a *less-than-significant* impact on existing water supply and delivery infrastructure.

**e. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? ..... Less-Than-Significant Impact**

Discussion

The project would result in increase to impervious surface areas. However, the proposed building envelope is generally consistent with the existing area that is proposed to be redeveloped. The additional stormwater would not require additional or expansion facilities. Please see Hydrology and Water Quality, questions d-f for additional discussion. Therefore, a *less-than-significant* impact would occur to existing storm drainage facilities as a result of project implementation.

**16. MANDATORY FINDINGS OF SIGNIFICANCE.**

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
c. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>

**a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? ..... Less-Than-Significant Impact**

Discussion

The proposed project site is currently developed. Although unlikely, the possibility exists that the project site supports special-status species and/or serves as foraging habitat for these species. This Initial Environmental Study/Mitigated Negative Declaration includes mitigation measures that would reduce any potential impacts to a less-than-significant level. Therefore, the proposed project would have *less-than-significant* impacts to special-status species, sensitive natural communities, and/or California's history.

**b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? ..... Less-Than-Significant Impact**

Discussion

The proposed project would redevelop the project site from two commercial buildings and an associated garage to seven residential units above approximately 7,0200 sq ft of retail. However, the inevitable impacts resulting from population and economic growth are mitigated by long-range planning to establish policies, programs, and measures for the efficient and economical use of resources. Long-term environmental goals, both broad and specific, have been addressed previously in several documents, the most comprehensive being the *General Plan*. The proposed project has included mitigation measures consistent with those outlined in the *General Plan*. Therefore, the impact is *less-than-significant*.

- c. **Does the project have impacts that are individually limited, but cumulatively considerable? ..... Less-Than-Significant Impact**
- d. **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ..... Less-Than-Significant Impact**

Discussion

Cumulative impacts may be identified in the categories of population growth, use of resources, demand for services, and physical changes to the natural environment. These would be mitigated to a degree through project-specific mitigation measures identified above and through cumulatively applied measures as development occurs. Therefore, a *less-than-significant* impact would result from the development of the proposed project.

## VII. STAFF AND SOURCES

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The following documents are referenced information sources utilized for this analysis:

1. BAAQMD CEQA Guidelines, 1996, Bay Area Air Quality Management District (revised 1999).
2. Biological Resource Assessment, Rivulet Development Project, Environmental Collaborative, May, 30, 2008.
3. California Department of Conservation, Farmland Mapping and Monitoring Program, Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Contra Costa County, 2004.
4. City of Clayton General Plan, City of Clayton, as amended February 6, 2007.
5. Clayton Town Center Specific Plan, Naphali H. Knox & Associates, Inc., March 1990.
6. Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Contra Costa County, California Department of Conservation, based on the Contra Costa County Soil Survey for Contra Costa County (see Item 2 above).
7. Soil Survey of Contra Costa County, California, US Department of Agriculture, Soil Conservation Service, 1977.
8. Stormwater Control Plan, 1005 & 1007 Oak Street, DeBolt Civil Engineering, May 2008.
9. Stream Assessment, Balance Hydrologics, April 21, 2008.
10. Traffic Impact Study, Rivulet Mixed Use Project, Abrams Associates, July 2008.
11. Tree Report, Rivulet, HortScience, Inc, April 2008.
12. East Contra Costa Habitat Conservation Plan, [www.cocohcp.org](http://www.cocohcp.org), June 2008.

# Appendices

# **Appendix A**

## **Biological Resource Assessment by Environmental Collaborative**

June 2008

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# **BIOLOGICAL RESOURCE ASSESSMENT**

*for the*  
**Rivulet Development Project**  
Clayton, California

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## **Biological Resources**

### Background and Methods

Biological resources were identified through the review and compilation of existing information and conduct of field reconnaissance surveys. The background review provided information on general resources in the area, the distribution and habitat requirements of special-status species and sensitive natural communities that have been recorded from or are suspected to occur in the Clayton vicinity, and specific resources on the site. Information sources included: records on occurrences of special-status species and sensitive natural communities maintained by the California Natural Diversity Data Base (CNDDDB) of the California Department of Fish and Game (CDFG); the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants of California* (2001); the CDFG's list of special animals and plants (2008); the *California Statewide Wildlife Habitat Relationships System* (CDFG, various dates); a *Tree Report* prepared for the site (HortScience, 2008); an evaluation of the creek bank conditions and treatment options on the site (Balance Hydrologics, 2008); and a *Habitat Suitability Evaluation for California red-legged Frog and Steelhead* for the site (Rana Resources, 2008). The recently adopted *East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan* (HCP) was also reviewed for applicability to the project site.

Field reconnaissance surveys of the site were conducted on January 24, March 30, and April 13, 2008. The field surveys served to determine existing vegetation cover, wildlife habitat, potential for occurrences of special-status species, and potential for occurrence of wetlands. The proposed Site Plan and Landscape Plan were compared to existing conditions to assess potential impacts and determine the need for any mitigation. Input was also provided into refinement of the Site Plan and Landscape Plan to ensure avoidance of sensitive resources, particularly mature native trees and the Mitchell Creek corridor.

The following provides a description of the biological resources on the site, an assessment of the potential impacts of the development application, and listing of measures recommended to mitigate potentially significant impacts.

### Environmental Setting

#### *Vegetation and Wildlife Habitat*

The site and surrounding lands have been disturbed by suburban development, pedestrian access along the Mitchell Creek corridor, and historical grazing use in the past. Most of the site is developed with existing structures, ornamental landscaping and turf, or is devoid of vegetative cover where dense shading and heavy foot traffic prevents successful groundcover establishment. Existing structures on the site consist of two temporary buildings fronting Oak Street, and a garage fronting High Street. The Mitchell Creek corridor forms the western edge of the site, and continues to support an important cover of native and non-native trees and shrubs, although groundcover species are

generally limited to non-native grassland species. Mitchell Creek is identified as an intermittent channel on the Clayton 7.5' USGS topographic map, and does not support any emergent freshwater marsh vegetation along the on-site segment of the creek.

Where groundcover is still present on the site, it is dominated by non-native grassland and ruderal (weedy) species. Common species in the grasslands include wild oat (*Avena sp.*), filaree (*Erodium sp.*), lotus (*Lotus scoparius*), brome (*Bromus sp.*), and bindweed (*Convolvulus arvensis*), all non-native species. Ornamental shrubs have been planted along the Oak Street frontage of the site in the border between the existing buildings and sidewalk.

Trees form the dominant vegetative cover on the site, forming a broken canopy along the Mitchell Creek corridor, and bordering portions of the Oak Street frontage and irrigated turf area on the north side of the northern building. The *Tree Report* (HortScience, 2008) provides an inventory of 26 trees with trunk diameters six inches and greater on the site. Tree species consist of native valley oak (*Quercus lobata*), California buckeye (*Aesculus californica*), red willow (*Salix rubra*), and black walnut (*Juglans hindsii*) along the creek corridor, and non-native coast redwood (*Sequoia sempervirens*), evergreen pear (*Pyrus kawakamii*), holly oak (*Quercus ilex*), California pepper (*Schinus molle*) and other species planted around the buildings and street frontages. Invasive tree-of-heaven (*Ailanthus altissima*) occurs as multi-stemmed trunks in several locations along the creek bank. Although the root system of the tree-of-heaven provides some channel bank protection, this species is known to spread aggressively, and out-compete native species if not controlled. According to the *Tree Report*, approximately 70% of the trees are fair to good condition. One valley oak tree (#272) along the edge of the creek is rated in poor condition. This tree leans to the southeast with an asymmetric crown, shows signs of stress in the trunk, and soil has eroded away from the root system of this tree and another valley oak on the opposite creek bank (#294).

Due to the proximity of existing development and the sparse ground cover vegetation, the site has only limited habitat value for wildlife. The remaining areas of non-native grassland cover on the creek bank may support or be frequented by species common to grasslands, such as pocket gopher, meadow vole, sparrows, and finches, and may occasionally be used by raptors, other bird species, and raccoon foraging along the creek. However, the extent of surrounding development and fact that Mitchell Creek enters a large box culvert under Clayton Road just downstream of the site limits opportunities for movement across the site by larger wildlife species, including black tailed deer, coyote and other predatory mammals. The mature oaks and other trees do provide important shade function of the creek and provide foraging and possibly nesting substrate for a wide variety of bird species, but no evidence of any nests were observed during the field surveys. However, there is a possibility that new nests could be established in the future before construction begins. No fish, amphibians or other aquatic life was observed in the creek channel during the surveys of the site, although the creek may be used for occasional dispersal.

*Special-status species*

Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Acts or other regulations. Also included are other species that are considered sufficiently rare by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts and other essential habitat. Species with legal protection under the Endangered Species Acts often represent major constraints to development, particularly when they are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take" of these species.

A habitat suitability analysis was conducted during the field reconnaissance surveys to determine the potential for occurrence of plant and animal species of concern on the site. Due to the extent of past and on-going disturbance, absence of specific habitat types necessary to support species of special concern (such as vernal pools, ultramorphic soils, or specific cover types), and absence of any indications of presence (such as nest, dens, or undisturbed native cover), no special-status species of concern are expected to occur on the site. This includes all animal species of concern, such as San Joaquin kit fox (*Vulpes macrotis mutica*), California tiger salamander (*Ambystoma tigrinum*), western pond turtle (*Clemmys marmorata marmorata*), California red-legged frog (*Rana aurora draytoni*), Alameda whipsnake (*Masticphis lateralis euryanthus*), mountain lion (*Felix concolor*), and roosting habitat for bat species of concern. Downstream barriers such as weirs, dams, and culver outfalls prevent the migration of adult steelhead (*Onchorhynchus mykiss irideus*) into the project reach, although non-migratory rainbow trout (*Onchorhynchus mykiss*) remain in the perennial sections of Mitchell Creek several miles upstream. Table 1 provides a list of special-status animal species known or suspected from the Clayton vicinity, their status, and preferred habitat characteristics.

Although considered highly unlikely, in theory there is a remote possibility that individual California red-legged frogs or western pond turtle could move along the site reach of Mitchell Creek from other occupied locations along Mitchell Creek, or that migrating steelhead could move upstream in the future if downstream barriers are eliminated. However, other than the remote opportunities for dispersal along the Mitchell Creek channel itself, there is no suitable permanent habitat on the site for any of these species. There are no CNDDDB records for any of these three species in the Mitchell Creek watershed, but an occurrence of California red-legged frog occurs in a tributary drainage to Mount Diablo Creek approximately 1 mile south of the site, and other occurrences of this species are known from the Clayton vicinity. California red-legged frog is typically associated with freshwater ponds and pools in riparian corridors with emergent vegetation and protective cover. Suitable pools and ponds necessary for successful breeding by California red-legged frog and western pond turtle are absent along this reach of Mitchell Creek, and periodic flushing during peak runoff events of winter and spring storms would prevent use of the pools along the creek for breeding. The bed and bank of the creek on the site also lack critical refugia and overhanging vegetation necessary for survival of California red-legged frog in an area heavily patrolled by raccoon and other predatory species, and deep pools necessary for escape by both of these species. There may be a remote potential for California red-legged frogs

and western pond turtle to disperse along the Mitchell Creek corridor, including the project site reach, but this appears unlikely given the extent of surrounding development, lack of protective vegetation, and absence of any breeding pools or ponds.

Because of concerns that Mitchell Creek contains aquatic habitat that could be used by aquatic-dependent special-status species known from the Clayton vicinity, a *Habitat Suitability Evaluation* (Rana Resources, 2008) of the site was conducted by Dr. Mark Jennings. Dr. Jennings is a herpetologist and fishery biologist, and a respected authority on California red-legged frog and steelhead, among other special-status animal species. Dr. Jennings concluded that the site is not suitable habitat for California red-legged frog, lacking the necessary cover, deep pools, and emergent vegetation necessary for permanent occupation or breeding by this species. He also concluded that the site is probably not suitable for steelhead because of the intermittent condition of Mitchell Creek in this reach, lack of pools necessary for over-summering, and downstream barriers that prevent migrating adults from returning to this reach of the creek.

There remains a remote possibility that nests of a number of special-status bird species could be established in the scattered trees and shrubs on the site prior to grading or construction. Other bird species of concern with varying potential for nesting on the site include: white-tailed kite (*Elanus caeruleus*), loggerhead shrike (*Lanius ludovicianus*), and more common raptors. Most bird nests in active use are protected under the Migratory Bird Treaty Act, and regulations in the State Fish and Game Code specifically protect nests of raptors. Although no records of nesting raptors have been reported from the site or immediate vicinity, and no evidence of presence was observed during the field surveys, preconstruction surveys would be necessary to insure no inadvertent take of nesting raptors if construction is initiated during the nesting season in the remote instance that new nests are established on the site.

Most of the special-status plant species known from the Clayton vicinity are associated with non-grassland habitat, such as chaparral, oak woodland, ultramorphic substrate, and stands of digger pine. These habitat types are absent from the site, making the likelihood of any special-status plant populations low. The extent of intensive existing development and other disturbance further limits the likelihood of occurrence of any grassland-dependent special-status species on the site, such as big tarplant (*Blepharizonia plumosa* ssp. *plumosa*), caper-fruited tropidocarpum (*Tropidocarpum carpparideum*), and round-leaved filaree (*Erodium macrophyllum*). No special-status species were observed on the site during the winter and spring surveys of the site; and due to the lack of native grassland cover, none are believed to occur on the site.

#### *Wetlands*

Although definitions vary, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their inherent value to fish and wildlife, use as storage areas for storm and floodwaters, and water recharge, filtration and purification functions. The US Army Corps of Engineers (Corps), California Department of Fish and Game (CDFG),

and San Francisco Bay Regional Water Quality Control Board (RWQCB) have jurisdiction over modification to riverbanks, lakes, streams channels, and other wetland features.

No indicators of jurisdictional wetlands were observed on the site during the field reconnaissance surveys. The Mitchell Creek channel is a regulated waterbody, but supports no emergent freshwater marsh vegetation. The few willows located along the west bank and to a lesser degree the scattered California buckeyes could be considered riparian vegetation. The limits of Corps jurisdiction under Section 404 of the Clean Water Act extend to the Ordinary High Water Mark (OHWM), which averages about 10 feet along this reach of Mitchell Creek. The CDFD regulate modifications to the bed and bank of the creek, under Section 1600 of the Fish and Game Code.

*Relevant Policies and Ordinances of the City of Clayton*

Several goals and policies of the Open Space/Conservation Element of the City of Clayton General Plan apply to biological resources on the site. These are listed below, numbered as they are in the General Plan.

*Goal: To maintain a system of active open space along stream channels and possible open space within hillsides as a means to preserve the rural character of the community.*

*Objective 3: To establish an open space conservation designations to preserve natural resources, to manage resources, to provide for outdoor recreation, to promote health and safety and to ensure orderly growth.*

*Policy 3b: Cluster development in order to allow a Private Open Space designation on sites that pose natural limitations such as stream channel, earthquake fault, unstable soil or prominent hilltop or ridge, fire hazard areas, and ground water recharge areas.*

*Policy 3e: Utilize the environmental review process to evaluate habitat impacts of a project and identify appropriate mitigations. This review may be done on an area-wide basis, for example, as through the Marsh Creek Road Specific Plan.*

The City of Clayton also has an ordinance (Ordinance No 82, Preservation of Trees on Public and Private Property) regulating the removal of trees on public and private lands. Trees protected under this Ordinance include those within a City Right-of-way or City property, trees on private property with a trunk diameter of six inches or greater measured 24 inches above grade, or any tree or stand of trees which have been specifically designated by the Clayton City Council as having historical significance. A permit is generally required for removal of any tree protected under the Ordinance, and specific standards must be met for granting a permit. The Ordinance includes regulations which are to apply to the preservation and maintenance of trees as part of a major or minor subdivision, addressing special construction within the tree dripline, construction avoidance within four feet of the tree trunk, prohibition on storage of construction equipment and fuels within 10 feet of a trunk, and restrictions on installation of wires or signage in a tree.

Project Impacts and Mitigation Measures

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
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*Would the proposal result:*

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		

f. Conflict with the provisions of an adopted habitat conservation plan?

			X
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**a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?....Less-than-Significant with Mitigation Incorporated**

Discussion

Construction of the proposed project would require demolition of the existing buildings, removal of the ornamental landscape species, and grading on the developed portion of the site. In general, this is not expected to result in any adverse impacts on special-status species. Essential habitat for listed species known from the Mt. Diablo vicinity, such as Alameda whipsnake, California tiger salamander, western pond turtle, and California red-legged frog, is absent on the site. Similarly, no occurrences of special-status plant species have been reported from the site or immediate vicinity, and no populations are believed to occur on the site.

Preconstruction surveys and construction zone exclusion practices would serve to avoid the remote potential for take of California red-legged frog, steelhead, and western pond turtle in the unlikely and remote instance that these species were present or were to disperse along the Mitchell Creek corridor onto the site in the future. The potential for any of these species to be found outside the active creek channel on the site is even less likely, but implementation of these measures as part of the project would serve to completely avoid any inadvertent take of these species. Areas disturbed during construction would be revegetated and restored, and no habitat would be lost for any special-status species as a result of the short-term construction disturbance associated with the project. Enhancement plantings proposed along the bank and building setback as part of the project as indicated in the Landscape Plan would provide additional shading of the habitat along the creek, as well as additional protective cover for terrestrial and aquatic species.

Several species of raptors from the Clayton vicinity may occasionally forage on the site or vicinity, but no nesting activity has been observed on the site. However, there remains a remote possibility that nests could be established in trees, shrubs, or suitable ground nesting locations prior to initiation of grading or construction. If new nests are established, grading or grubbing could result in inadvertent loss of nesting birds unless adequate protective measures are taken.

**Mitigation Measure BIO-1.** Pre-construction nesting surveys for raptors and migratory birds protected under the federal Migratory Bird Treaty Act shall be

conducted if initial grading and building demolition is to be conducted during the months of March through August. A qualified biologist shall conduct the surveys no more than 14 days prior to initiation of grading, building demolition, or tree removal. If any of these species are found within the construction area after April of the construction year, grading and construction in the area shall either stop or continue only after the nests are protected by an adequate setback approved by a qualified biologist. If permanent avoidance of nests is not feasible, impacts on raptor and migratory bird nests shall be minimized by avoiding disturbances to the nest location during the nesting season unless a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from those nests are foraging independently and capable of independent survival at an earlier date. No preconstruction surveys are required if grading, building demolition, or tree removal occurs outside the nesting season (September through February).

**Mitigation Measure BIO-2:** A preconstruction survey shall be conducted by a qualified biologist within 7-days of construction to confirm absence of any fish, amphibian, or reptile species of concern along the project reach of Mitchell Creek. In the remote instance that listed California red-legged frog or steelhead individuals are encountered, the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries) shall be consulted to determine appropriate avoidance measures prior to initiation of any construction activities. Any western pond turtle encountered shall be relocated to secure pool habitat selected by the qualified biologist.

**Mitigation Measure BIO-3.** A qualified biologist shall be retained to oversee construction and ensure that no inadvertent take of California red-legged frog, steelhead, or western pond turtle occurs as a result of short-term disturbance near Mitchell Creek. This shall include the following provisions:

- Prior to any grading or grubbing of the site, the qualified biologist shall conduct a preconstruction survey to confirm absence of any California red-legged frog, steelhead, or western pond turtle on the site, as called for in Mitigation Measure BIO-2.
- Silt fencing shall be installed at the west edge of the construction zone and to the east of the top of bank, buried a minimum of six inches and extending a minimum of two feet above grade, to serve as a barrier to keep ground motile wildlife dispersing along the creek corridor from entering the construction zone. The fencing shall remain in place during the entire construction period.
- Construction workers shall be trained by the qualified biologist regarding the potential presence of California red-legged frog and western pond turtle, that these species are to be avoided, that the foreman must be notified if they are seen, and that construction shall be halted until appropriate measures have been taken. For California red-legged frog, work shall be halted until authorization to proceed is obtained from the USFWS. Harassment of California red-legged frog is a violation of federal law.

- During the construction phase of the project, a qualified biologist or an on-site monitor (such as the construction foreman trained by the qualified biologist) shall check the site in the morning and in the evening of construction activities for the presence of California red-legged frog and western pond turtle. This includes checking holes, under vehicles and under boards left on the ground. If any California red-legged frog are found, construction shall be halted, and the monitor shall immediately notify the qualified biologist in charge and the USFWS. Construction shall not proceed until adequate measures are taken to prevent dispersal of any individuals into the construction zone, as directed by the USFWS. Subsequent recommendations made by the USFWS shall be followed.
- No one shall handle or otherwise harass any individual California red-legged frogs encountered during construction, with the exception of a Service-approved biologist. The qualified biologist in charge shall train the on-site monitor in how to identify California red-legged frog.

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

*Discussion*

Most of the site is not considered a sensitive natural community type, and the Mitchell Creek corridor would be avoided as part of the development-related aspects of the project, protecting this sensitive riparian community type. The new building would be setback a minimum of 10 feet from the top-of-bank, extending no closer to the top of bank than the existing structures, and mature native trees would be retained. The creek corridor would be enhanced as part of the project through removal of invasive tree-of-heaven and plantings of additional native riparian species as indicated in the Landscape Plan. The new structure would be setback at least as far as the existing structures, and access would be restricted away from the creek. The proposed removal of invasive species and additional native plantings would improve the existing habitat values and increase the native species diversity along this reach of Mitchell Creek. The small plaza area proposed at the northern edge of the site would include interpretive signage describing the sensitivity of the creek corridor and importance of protecting creek habitat. This overlook would be sited in a location designed to minimize if not fully disrupt the current foot traffic of pedestrian crossing the creek and denuding the banks. Controls specified in the *Tree Report* to avoid damage to mature trees to be retained and Best Management Practices implemented as part of the Stormwater Pollution Prevention Plan for the project would prevent sedimentation in the creek channel and would serve to protect the riparian sensitive natural community along Mitchell Creek.

**c. Would the project have a substantial adverse effect on federally protected**

**wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marshes or vernal pools) through direct removal, filling, hydrological interruption, or other means? .....Less-Than-Significant Impact**

Discussion

No improvements or direct modifications to the Mitchell Creek channel are proposed as part of this project. The new structure would be setback a minimum of 10 feet from the top of bank and the existing native trees would be retained along the creek channel. The creek corridor would be enhanced as part of the project through removal of the invasive tree-of-heaven and installation of native riparian species, such as California buckeye, California rose, and flowering current, as indicated in the Landscape Plan. Enhancement plantings would be installed above the Ordinary High Water Mark, which serves as the jurisdictional limits of the Corps. Authorization from the Corps under Section 404 of the Clean Water Act would not be required as no improvements are proposed below the OHWM of the creek channel and no wetlands would be filled or modified by the project. Informal consultation with the CDFG indicates that the creek corridor modifications proposed as part of the project would not require their authorization under the Streambed Alteration Agreement process (Kozicki, 2008). This includes construction of new structures, the creek overlook, thinning of the canopy to the leaning valley oak (Tree #272), removal of invasive tree-of-heaven, and installation of native riparian enhancement plantings along the creek bank and adjacent uplands.

Adequate protections would be necessary and implemented as part of the project to prevent the secondary effects of sedimentation and water quality degradation as a result of construction-related disturbance. Best Management Practices would be implemented as part of the project, which would ensure that the potential for any downgradient sedimentation impacts are adequately controlled. These potential indirect impacts would be addressed by the required Stormwater Pollution Prevention Plan and other controls to protect long-term water quality in Mitchell Creek called for in the Hydrology section of this IS/MND.

**d. Would the project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? .....Less-Than-Significant Impact**

Discussion

The proposed project is not expected to have a significant impact on existing wildlife habitat, interfere substantially with the movement of resident or migratory wildlife, or impede access or use of wildlife nursery locations. The new structure would be restricted to the vicinity of the existing structures, and a minimum setback of 10 feet would be

provided from the top-of-bank to Mitchell Creek. Given that the new building would be sited basically within the footprint of the existing structures and landscaped areas, and this portion of the site is of relatively low value to wildlife, no significant impacts on existing wildlife habitat are anticipated. No mature native trees would be removed, and the creek corridor would be enhanced through removal of invasive tree-of-heaven and plantings of native riparian species, as indicated in the Landscape Plan. No direct impacts to Mitchell Creek are anticipated, and the creek would still be available for dispersal and movement of any aquatic and terrestrial species currently associated with the site. Overall, the enhancement proposed along the creek would serve to improve the habitat values of the corridor.

- e. **Would the project conflict with any local policies or ordinances protecting biological resources, including trees?** **Less-than-Significant with Mitigation Incorporated**

Discussion

The proposed application would generally conform with the relevant policies and ordinances of the City of Clayton. This includes the Tree Protection Ordinance (Chapter 15.70 of the Zoning Code), which calls for the protection of certain species of trees, a permit when removal of any tree with a trunk diameter of six inches or greater is proposed, and replacement plantings. The *Tree Report* provides a thorough inventory of trees on the site. The recommendations contained in this report regarding selected tree preservation and construction avoidance are adequate, but the report recommends that the mature leaning valley oak (Tree #272) along the creek bank be removed. The *Tree Report* acknowledges that this tree could be retained through removal of 50 percent of the canopy, which is much preferable given its importance to the existing riparian corridor along Mitchell Creek. Adherence to sensitive construction practices called for in the *Tree Report*, or provisions for replacement plantings would ensure conformance with the intent of the City's ordinance. Additional tree plantings proposed as part of the Landscape Plan for the project, including enhancement plantings along the creek corridor, would serve to replace the ornamental trees to be removed as part of site development.

**Mitigation Measure BIO-4.** The Tree Preservation Guidelines called for in the *Tree Report* (HortScience, 2008) shall be followed to preserve native oaks and other noteworthy [??] trees on the site. Of particular concern is the large valley oak (Tree #272) which must be heavily pruned to prevent toppling and reduce the risk to humans and property. This large valley oak shall be retained, and recommended pruning of this tree shall be performed under the supervision of a certified arborist.

**Mitigation Measure BIO-5.** The project shall conform with the City of Clayton tree Protection Ordinance (Chapter 15.70 of the Zoning Code), through adherence to the Tree Preservation Guidelines called for in the *Tree Report* and provisions for replacement plantings, which will be incorporated into the Final Landscape Plan.

**f. Would the project conflict with the provisions of an adopted habitat conservation plan? ..... No Impact**

Discussion

The proposed project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved conservation plan. The East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) was recently adopted by the participating agencies, and became effective in the City of Clayton in January 2008. The HCP/NCCP is intended to provide a coordinated, regional approach to special-status species conservation and development regulation. A total of 28 species are covered under the HCP/NCCP, including California red-legged frog, California tiger salamander, Alameda whipsnake, San Joaquin kit fox, vernal pool tadpole shrimp, and burrowing owl, among others. The HCP/NCCP provides streamlined permits from the U.S. Fish and Wildlife Service (USFWS) and CDFG for covered species for new urban development projects and a variety of public infrastructure projects. The goal is to eventually provide coverage for agency authorizations for wetland-related impacts, but these are currently not covered under the HCP/NCCP.

Although the City of Clayton is a participating agency and the project site is located within the HCP/NCCP boundaries, the proposed project is exempt for two reasons. First, the project site is identified as an Urban land cover type in the HCP/NCCP and second, the site occupies less than one acre of land. Because the project is exempt as a regulated development project under the HCP/NCCP, conformance with the adopted plan is not required, no impacts are anticipated, and no fees would be assessed. However, the project has been designed or conditioned through mitigation specified in this report to avoid possible inadvertent take of special-status species, minimize disturbance to the Mitchell Creek corridor, and restore and enhance existing habitat along the creek corridor, which would be consistent with the general goals of the HCP/NCCP.

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# **Appendix B**

**Stormwater Control Plan by DeBolt Civil Engineering**

~~May 2008~~ April 2010

VIA EMAIL bob@draftingboard.com

April 21, 2010  
Job No. 08133

## DeBolt Civil Engineering



811 San Ramon Valley Boulevard  
Danville, California 94526  
Tel: 925/837-3780  
Fax: 925/837-4378

Mr. Bob Staehle  
VIZ F/X DIGITAL ENVIRONMENTS  
P.O. Box 974  
215 Mountaire Circle  
Clayton, CA 94517

Dear Bob:

Attached please find a PDF copy of the updated Storm Water Control Plan on which we have:

- A) Revised section 1-C to read as follows: "The Frank and School District properties to the West of the proposed development sheet flow across the subject parcel into Mitchell Creek. An earth swale will be installed on the uphill side of the bio-retention area to re-route any runoff from the Frank or School District parcels around the IMP. As a result, only the runoff from the development need be considered in the calculations."
- B) Section III, paragraph 3, the sizing factor has been corrected to be 0.04.
- C) Section V, the type of project has been modified to read, mixed retail/commercial/residential.

Should you have any questions or need additional information, please give me a call.

DE BOLT CIVIL ENGINEERING

James E. Diggins

JED: amf  
Enclosures

# **1005 & 1007 Oak Street**

City of Clayton  
Contra Costa County  
California

## **STORMWATER CONTROL PLAN**

**Prepared By:**

**DeBolt Civil Engineering  
811 San Ramon Valley Boulevard  
Danville, CA 94526**

**April 19, 2010  
Job No. 08133**

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## APPENDIX

- A. Vicinity Map
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## PLANS

Storm Water Treatment Plan Exhibit

## I. Project Setting

A) **Project Description & Location:** The project site is located on Oak Street between High Street and Center Street in the City of Clayton. Mitchell Creek runs along the westerly side of the proposed development parcel, which defines that boundary. The proposed project will remove the existing structures and construct a new two story mixed-use building with retail on the ground floor and residential units above. The property is currently owned by the City of Clayton.

B) **Site Features:** The site currently contains two buildings and a garage, which will be removed.

The site slopes from south to north. The elevation difference across the site ranges from 399 to 395 feet. Improvements including pavement, storm drainage, sanitary sewer and water, and other utilities exist along the Oak Street and High Street frontages.

The project site has been previously disturbed with the construction of the two buildings. Additional construction occurred with the installation of the frontage improvements and utilities. The adjoining parcels have also been developed, which has impacted the site.

There are only a limited number of trees proposed for removal. The storm drainage system in front of the parcel is public, and lies within the right-of-way of Oak Street.

The project site consists of type "D" soils, and the depth of the groundwater varies from 3 feet to 8 feet.

C) **Opportunities & Constraints for Stormwater Control:** The site will be developed with the widening of High Street and the construction of a two-story building. The street improvements have been coordinated with City staff, the Fire Department, and the Waste Management Company.

The Frank and School District properties to the West of the proposed development sheet flow across the subject parcel into Mitchell Creek. An earth swale will be installed on the uphill side of the bio-retention area to re-route any runoff from the Frank or School District parcels around the IMP. As a result, only the runoff from the development need be considered in the calculations.

One constraint of the project is the development of the surrounding sites. The grading, drainage, etc of the proposed project must conform with the grades, fences, curb and gutter, etc. surrounding the site. This limits the flexibility in establishing drainage patterns and pad elevations for the proposed buildings.

The Mitchell Creek, which traverses the edge of the portion of the property proposed for development, requires some constraints. The building of

structures adjacent to the creek are subject to creek structure setback and 100 year flood requirements.

The significant portion of the site impervious area is the roof of the proposed building. This roof drainage typically generates quick runoff. The proposal is to direct this runoff to one primary infiltration planter with a smaller 60 square foot planer to serve only the plaza overlook area. The majority of the site drains to a sump where the runoff will be pumped across the creek and discharged into IMP-1. The runoff from DMA-8, will drain to the infiltration planter immediately adjacent for treatment.

Vegetated or grassy swales will be incorporated around the facilities but they have not been included in the treatment area calculations.

All areas with BMPs will drain within the required 72 hours to alleviate vector concerns. The building will have curbside trash and recycling pick-up.

## **II. Measures to Limit Imperviousness:**

### **A) Measures to cluster development and protect natural resources**

The following design principles were incorporated to minimize Stormwater related impacts:

- 1) Access to the site is via Oak and High Streets, both are existing paved roadways.
- 2) Steep slopes and erodible soils were avoided.
- 3) Specific development envelope has been defined.
- 4) The site is being developed as allowed by the City for the specific zoning of the parcel.
- 5) The proposed project will make use of existing facilities, which will minimize required grading.
- 6) The design has attempted to minimize disturbance to vegetation and soils.
- 7) The drainage has been designed such that it replicates the site's natural drainage patterns.
- 8) The number of parking spaces is at the minimum required by the City to minimize paved areas.
- 9) Where possible, downspouts positively drain to infiltration planters. .
- 10) The development rights of the area of the site lying within the creek structure setback can be granted to the City.
- 11) Limiting construction immediately adjacent to the creek will reduce the possibility of contaminants discharging directly into the creek.

### **B) Measures to limit directly connected impervious areas**

In order to limit the amount of impervious areas, the following have been proposed:

- 1) Minimum street widths
- 2) The building design is more compact.
- 3) Minimum parking spaces are proposed; therefore no additional impervious surface for non-required parking will be constructed.

Conventional asphalt pavement is proposed to be used for the streets. This is required for Fire and garbage truck use due to the existing soils. Permeable pavements will not be used for private driveways and parking spaces as the existing soils conditions will not provide a suitable base.

**C) Measures to meet C.3 requirements**

Infiltration planters will be incorporated into the site design. Although the existing soils do not meet the infiltration rate; material will be imported to be placed in the infiltration planters. Cisterns will not be considered with this project. The available area to place the cistern is minimal, and the vector control issue would be difficult to mitigate.

**III. Selection and Primary Design of Stormwater Treatment BMPs**

To minimize the quantity of pollutants that enter the storm drainage system, best management practices are proposed. The appropriate best management practice for the property will be infiltration planters. A drawing of a typical infiltration planter presented in the Contra Costa County Stormwater C.3 Guidebook is shown in the Appendix. Stormwater pollutants are removed through a combination of overland flow through vegetation, surface detention, and filtration through the soil. A perforated underdrain pipe will be used under planters instead of infiltration of runoff into native soil because the underlying soil at the site has a slow infiltration rate of 0.06 to 0.20 inches per hour.

The California Stormwater Quality Association has documented that the most efficient and economical best management practices are directed toward small, frequent events that over time produce more total runoff than the larger, infrequent storms used for design of drainage and flood control facilities. The Contra Costa Clean Water Program Stormwater C.3 Guidebook recommends capture and infiltration or treatment of the flow produced by runoff resulting from a rain equivalent to 0.2 inches per hour.

The Stormwater C.3 Guidebook recommends a 0.04 sizing factor for infiltration planters based on amount of impervious rainfall. The impervious areas of the site, including roofs, parking areas, streets and driveways have been divided into distinct drainage areas as shown on the Storm Water Control Plan. Runoff from each of these impervious areas is managed by routing storm water to the infiltration planters to treat the runoff.

The runoff from the building roofs and private paved areas will be discharged to a sump, and the runoff pumped to an infiltration planter on the west side of the creek. The infiltration planter will be located as shown on the Storm Water Treatment Plan.

There currently exists a public storm drainage system in the Oak Street right-of-way. Unfortunately, the shallow depth of the system precludes it's use for this project.

The size of each drainage area and corresponding BMPs are shown in Tables included in of this document.

**Project Name:** Oak Street  
**Project Type:** Treatment Only  
**Location:** Clayton  
**APN:** 119-050-034  
**Drainage Area:** 16455 sf  
**Mean Annual Precipitation:** 17.5 in

#### IV. Areas Draining to IMPs

**IMP Name:** IMP1 (Soil Type: D)

**IMP Type:** Bioretention Facility

**Soil Type:** D

DMA Name	DMA Area (sq ft)	Post-Project Surface Type	DMA Runoff Factor	DMA Area x Runoff Factor
DMA1	2,080	Concrete or Asphalt	1.00	2,080
DMA2	1,775	Pervious Concrete	0.10	178
DMA3	1,450	Conventional Roof	1.00	1,450
DMA4	7,490	Conventional Roof	1.00	7,490
DMA5	2,000	Conventional Roof	1.00	2,000
DMA6	360	Landscape	0.10	36
DMA7	600	Pervious Concrete	0.10	60
<b>Total</b>				<b>13,284</b>

IMP Sizing Factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
0.040	1.000	532	800

#### IV. General Treatment BMP Characteristics

##### Primary Infiltration Planter

- Planter to be installed level – 2% maximum slope.
- Layer of sandy loam, 18 inches deep, with a minimum infiltration rate of 5 inches per hour.
- Surface to be covered with 2"-3" mulch 48" deep gravel layer beneath the entire extent of the imported engineered soil layer.
- Perforated pipe underdrain, minimum 6 inches diameter, connected to off-site drainage.
- Design ponding depth is 12".
- Infiltration planter will have a minimum 18" depth of sandy loam with a minimum infiltration rate of 5" per hour. The planters will be underdrained and the underdrains connected to an underground storm drainage system. This will carry the treated runoff as well as any overflow, off site. We expect all drainage into and away from the BMPs to be gravity.
- Infiltration planter may be planted with a palette of plants and trees. The planting will be selected for viability in a well-drained soil occasional inundation. Irrigation is expected to maintain plant viability.
- Tributary impervious area does not exceed 2 acres.

##### Secondary Infiltration Planter

- Planter to be installed level – 2% maximum slope.
- Layer of sandy loam, 18 inches deep, with a minimum infiltration rate of 5 inches per hour.
- Surface to be covered with 2"-3" mulch 48" deep gravel layer beneath the entire extent of the imported engineered soil layer.
- Weep holes to be installed at base of planter.
- Design ponding depth is 12".
- Infiltration planter will have a minimum 18" depth of sandy loam with a minimum infiltration rate of 5" per hour.
- Infiltration planter may be planted with a palette of plants but no trees. The planting will be selected for viability in a well-drained soil occasional inundation. Irrigation is expected to maintain plant viability.

#### V. Source Control Measures

This mixed retail/commercial/residential project will create few potential sources of stormwater pollutants. Sources to be controlled are:

- Potential dumping of washwater or other liquids into storm drain inlets
- Need for future indoor or structural pest control
- Fertilizers and pesticides used in garden maintenance
- Vehicle trash receptacle washing
- Roofs and refuse areas

The following table lists potential pollutant sources on the development site and the corresponding source control measures specified on the *Stormwater C.3 Guidebook, Fourth Edition*. All areas where these activities occur will drain to stormwater treatment BMPs. To further reduce the potential for pollutants to enter runoff, permanent and operational BMPs will be implemented as described in the Table.

**Sources and Source Control BMPs**

POTENTIAL SOURCE	PERMANENT CONTROL BMPs	OPERATIONAL BMPs
On-Site Storm Drain Inlets (dumping to area drains)	All area drains will be marked with the words "No Dumping! Flows to Bay"	Markings will be periodically repainted or replaced. Inlets and pipes conveying Stormwater to BMPs will be inspected and maintained as part of BMP Operation and Maintenance Plan.
Need for future indoor and structural pest control.		Integrated Pest Management (IPM) information will be provided to new homeowners.
Landscape/outdoor pesticide use	<p>Landscape plans: Are designed to minimize irrigation and runoff and to minimize use of fertilizers and pesticides that can contribute to Stormwater pollution.</p> <p>Specify plantings within infiltration planters that are tolerant of the sandy loam soils and periodic inundation.</p> <p>Include pest-resistant plants.</p> <p>Include plantings appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency and plant interactions.</p>	<p>Landscape will be maintained using minimum or no pesticides.</p> <p>IPM information will be provided to new homeowners.</p>
Vehicle washing	Driveways & parking areas drain to infiltration planters.	Distribute Stormwater Pollution Prevention Information to new homeowners.
Roof areas	Roof downspouts drain to infiltration planters.	<p>Roof gutters will be cleaned periodically.</p> <p>Distribute Stormwater Pollution Prevention Information to new homeowners.</p>

## **VI. Permitting and Code Compliance Issues**

The contractor/developer is responsible to obtain the necessary permits to construct the project. These include, but are not limited to:

- A) Grading Permit
- B) Encroachment Permit
- C) Building Permit

There are no known conflicts between the Stormwater Control BMPs and the City of Clayton ordinances, policies or other development requirements. Any conflicts that are found will be resolved through the design review process or via subsequent permitting.

## **VII. BMP Operation and Maintenance**

### **A) Ownership and Responsibility for Maintenance into Perpetuity**

The property owner agrees to operate and maintain the storm water treatment facilities constructed with the project. The project applicant agrees to accept responsibility for the interim operation and maintenance of the facilities until such time as this responsibility is Formally transferred to a subsequent buyer.

The property owner will develop and enter into an operation and maintenance plan and agreement to ensure the long-term maintenance of the on-site water quality features associated with the project. The Stormwater Facility Operation and Maintenance Agreement shall be prepared per the Model proposed by the Contra Costa Clean Water Program. Such agreement will "run with the land" and be enforceable on subsequent property owners of all lots.

### **B) Summary of Maintenance Requirements**

Routine maintenance of the infiltration planters is needed to insure that flow will remain unobstructed. Maintenance will also be needed to prevent erosion, and insure that soils are held together by plant roots. Because the planters remove pollutants primarily by filtering runoff slowly through an active layer of soil, maintenance will also include verifying that the plants are biologically active.

Typical routine maintenance of the planters consists of the following:

- Inspect planters for channels, exposure of soils, or other evidence of erosion. Clear any obstructions and remove any accumulation of sediment. Soils and plantings must be maintained.
- Inspect planters regularly and after storms.

- Observe soil at the bottom of the planters or filter for uniform percolation throughout. If portions of the planter or filter do not drain within 48 hours after the end of a storm, the soil should be tilled and replanted. Remove any debris or accumulations of sediment.
- Examine the vegetation to insure that it is healthy and dense enough to provide filtering and to protect soils from erosion. Replenish mulch as necessary, remove fallen leaves and debris, prune large shrubs or trees and mow turf areas. Confirm that irrigation is adequate and not excessive. Replace dead plants and remove invasive vegetation.
- Abate any potential vectors by filling holes in the ground in and around the planters and by insuring that there are no areas where water stands longer than 48 hours following the storm. If mosquito larvae are present and persistent, contact the Contra Costa County Vector Control District for information and advice. Only a licensed individual or contractor should apply Mosquito larvicides only when absolutely necessary and then.

Routine maintenance of the pump is needed to assure that the runoff can be discharged to the infiltration planter for treatment.

Typical routine maintenance of the pump consists of the following:

- Remove floatables and debris from sump
- Remove sediment from vault
- Visually inspect to determine if mosquitoes or other vectors are present in vault
- Manually trigger the system float suitables to ensure that the pump will operate as designated

**C) Inspection/Maintenance Responsibility for Structural Source Control and Treatment Control BMPs:**

Maintenance mechanism for all structural sources control and treatment control BMPs:

- 1) Trash enclosure areas to be inspected for debris and cleaned every three months.
- 2) All inlets to be inspected for debris twice a year, with one of those inspections held on October 1<sup>st</sup>.
- 3) Planters should be checked for plant and landscape health. They should also be checked for removable amounts of silt. The landscape and planter soils should also be checked for aeration.

**D) Operation and Maintenance**

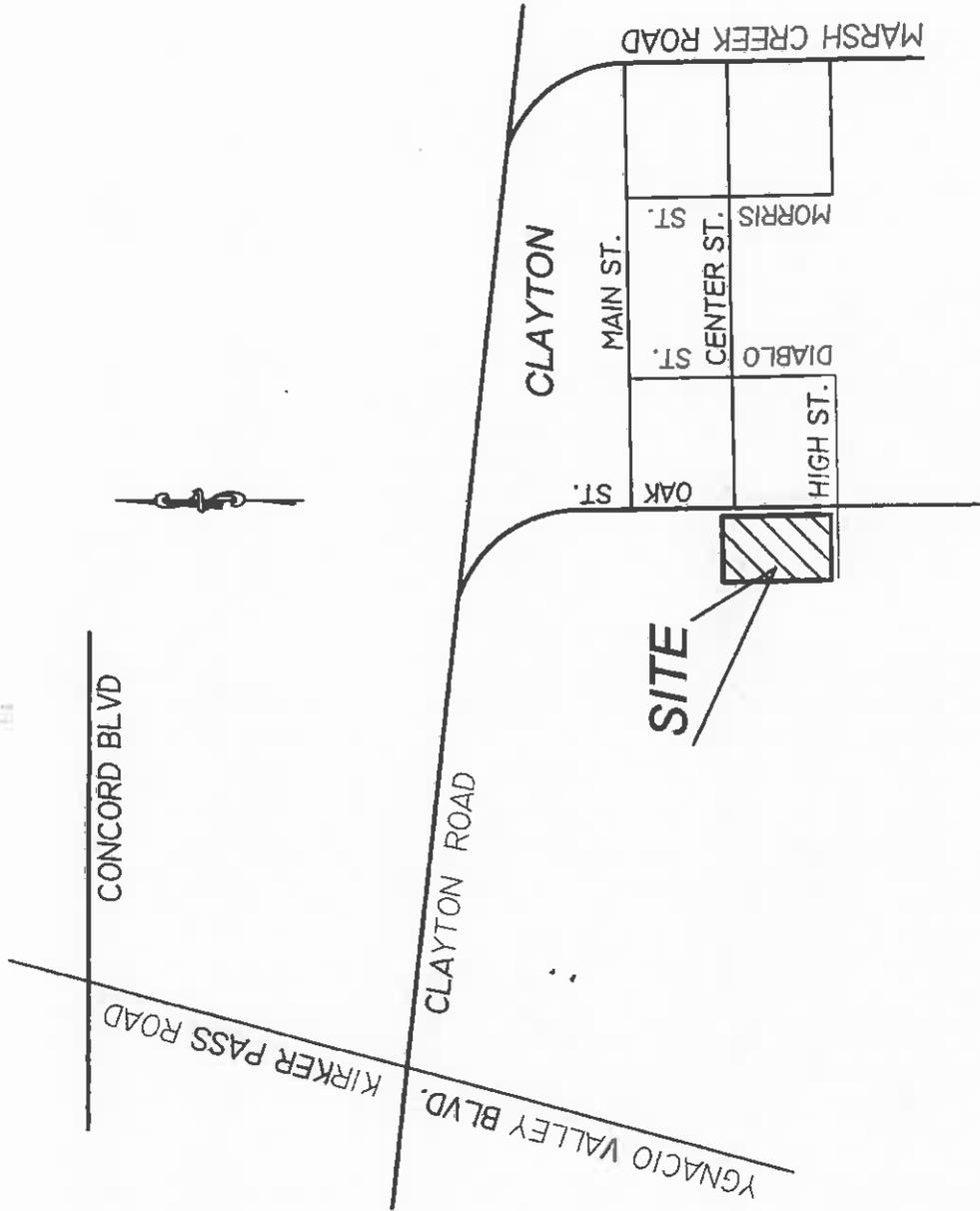
- a. A draft Storm Water Control Operation and Maintenance Plan should be submitted with the construction plans. A final Storm Water Control Operation and Maintenance Plan will be submitted prior to issuance of a Certificate of Occupancy.
- b. A Storm Water management Facilities Operation and Maintenance Agreement should be executed.

**VIII. Construction Plan C.3 Checklist**

<b>Stormwater Plan Reference</b>	<b>BMP Description</b>	<b>Sheet #</b>
Grading Plan	The final grading plan shall be designed to conform with the SWCP	
Drainage Plan	The final drainage plan shall be designed to conform with the SWCP	
Section III, page 5	Infiltration Planters located and detailed in the SWCP	
Section IV, page 6	On-site drainage inlets to be marked with "No Dumping" messages	
Section V, page 6	Plant selection to minimize irrigation and use of fertilizers and pesticides. Plants to be pest resistant	
Grading Plan In-ground Infiltration Planter	Preservation of existing trees and shrubs	
IMP #1	800 SF Planter located on the West bank of Mitchell Creek	
IMP #2	60 SF Planter located adjacent to Oak Street on the North side of the parcel.	

**IX. Certification**

The selection and preliminary design of Treatment BMPs and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order R2-2003-0022 and subsequent amendments.



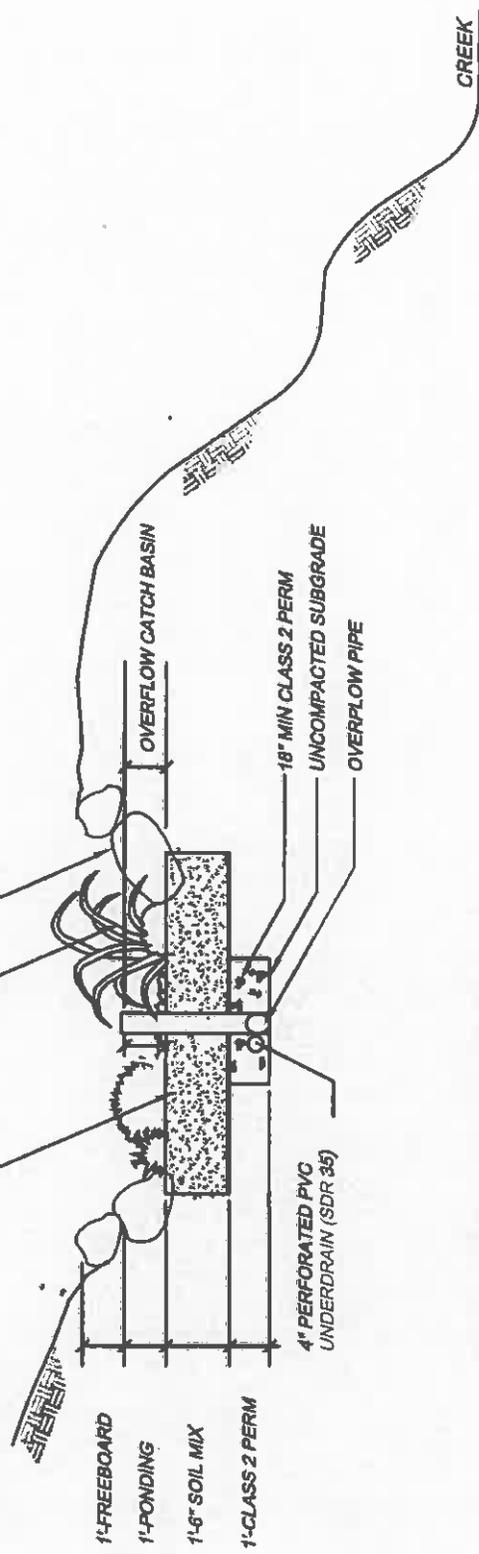
**VICINITY MAP**  
N.T.S.

NOTE: SOIL MIX  
 MIX A - TOPSOIL BLEND  
 10% - 20% TOPSOIL  
 50% - 60% FINE SAND  
 30% - 40% COMPOST

PLANTING IN BASIN EXTENDS BEYOND  
 BORDER TO PROVIDE VISUAL CONTINUITY

12" TO 3" DIA BOULDERS AS  
 BORDER PERIMETER OF BASIN  
 (TYP)

18" SOIL MIX WITH  
 MINIMUM INFILTRATION  
 RATE OF 5"/HR

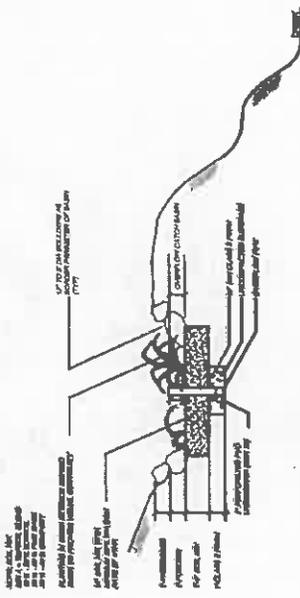


# FILTRATION PLANTER

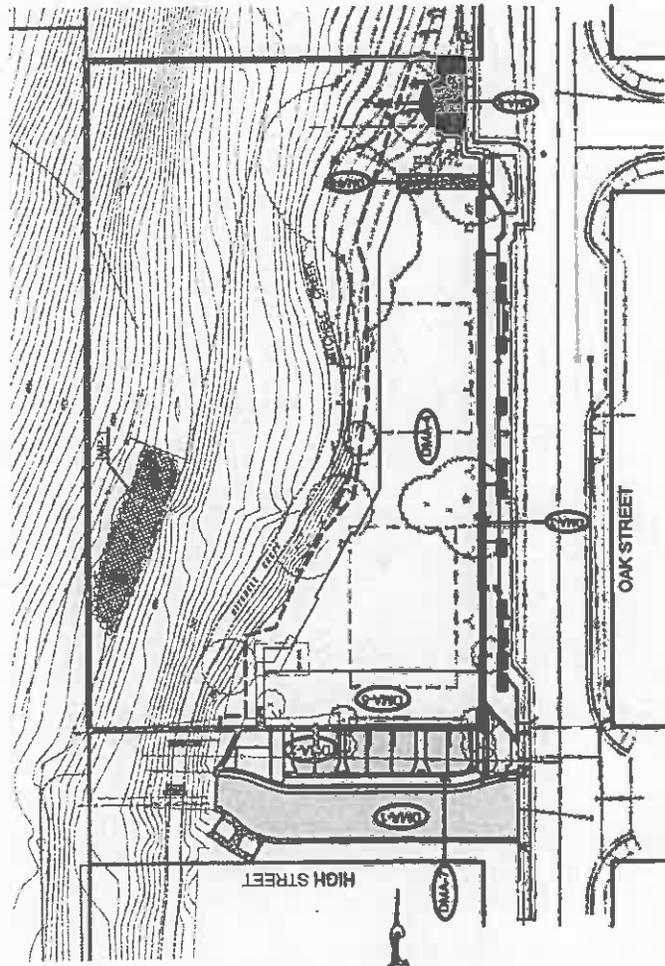
N.T.S.

**UNDERGROUND STORAGE REQUIREMENTS**

THE DESIGN OF THE ABOVE-GROUND TREATMENT PLANTERS IN CONTRA COSTA COUNTY IS BASED UPON A DESIGN OF 1.5 INCHES PER HOUR INFILTRATION RATE. THE INFILTRATION RATE IS BASED ON THE DESIGN OF THE PLANTERS AND THE AMOUNT OF POROSITY FOR THE MATERIAL. THE INFILTRATION RATE IS BASED ON THE DESIGN OF THE PLANTERS AND THE AMOUNT OF POROSITY FOR THE MATERIAL. THE INFILTRATION RATE IS BASED ON THE DESIGN OF THE PLANTERS AND THE AMOUNT OF POROSITY FOR THE MATERIAL.



**FILTRATION PLANTER**  
N.Y.A.



Project Name: Oak Street  
 Project Location: 1005 & 1007 Oak Street  
 Location: Contra Costa  
 APRIL 11, 2008  
 Drawings Area: 18448 sq ft  
 Most Annual Precipitation: 17.3 in

**IV. Areas Draining to IMPs**

IMP Name: IMP-1 (Soil Type: D)

IMP Name	Area	Soil Type	Factor	Proposed Area or Volume
IMP-1	2,000 sq ft	DIRTY	1.0	2,000 sq ft
IMP-2	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-3	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-4	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-5	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-6	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-7	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-8	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-9	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-10	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-11	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-12	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-13	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-14	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-15	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-16	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-17	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-18	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-19	1,000 sq ft	DIRTY	1.0	1,000 sq ft
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IMP-21	1,000 sq ft	DIRTY	1.0	1,000 sq ft
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IMP-24	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-25	1,000 sq ft	DIRTY	1.0	1,000 sq ft
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IMP-39	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-40	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-41	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-42	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-43	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-44	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-45	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-46	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-47	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-48	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-49	1,000 sq ft	DIRTY	1.0	1,000 sq ft
IMP-50	1,000 sq ft	DIRTY	1.0	1,000 sq ft

Software Tool Warnings  
 No warnings to report.

DMA	AREA	SURFACE
DMA1	2,000 sq ft	DIRTY
DMA2	1,000 sq ft	DIRTY
DMA3	1,000 sq ft	DIRTY
DMA4	1,000 sq ft	DIRTY
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DMA6	1,000 sq ft	DIRTY
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DMA50	1,000 sq ft	DIRTY

IMP	SIZE
IMP-1	1,000 sq ft
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IMP-48	1,000 sq ft
IMP-49	1,000 sq ft
IMP-50	1,000 sq ft

- LEGEND**
- MOBILE PLANTERS
  - CATCH BASIN
  - STORM DRAIN LIE
  - EARTH SWALE
  - DEPOTED AREA (RAIN DRAINAGE MANAGEMENT AREA)
  - INTEGRATED MANAGEMENT PRACTICE

TM 5

DOBAL Civil Engineering  
 11115 Sycamore Valley Road  
 Danville, California 94526  
 Tel: 925/731-7000  
 Fax: 925/731-7001

NO.	REVISION	DATE
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TENTATIVE MAP 01-08  
 1005 & 1007 OAK STREET  
 CONTRA COSTA COUNTY

CITY OF CLAYTON

CALIFORNIA

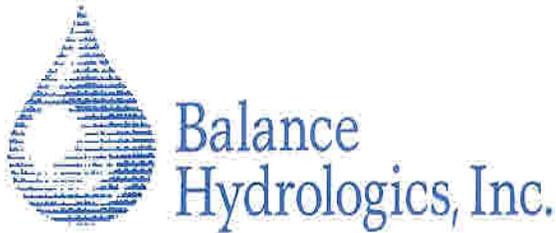
STORM WATER CONTROL  
 PLAN EXHIBIT

STORM WATER CONTROL  
 PLAN EXHIBIT

# **Appendix C**

## **Stream Assessment by Balance Hydrologics**

April 2008



841 Folger Ave. • Berkeley, CA 94710-2800 • (510) 704-1000  
224 Walnut Ave., Ste. E • Santa Cruz, CA 95060-3836 • (831) 457-9900  
281 Nevada St. • Auburn, CA 95603-4617 • (530) 887-9988  
www.balancehydro.com • email: office@balancehydro.com

April 21, 2008

Mr. Uzoma Nwaku, LLB; MBA  
1042 Pebble Beach Drive  
Clayton, California 94517

**RE: Proposed bank treatments on Mitchell Creek at the Oak Street Development in the City of Clayton, California.**

Thank you for inviting us to assist with the evaluations of Mitchell Creek at the 1005 and 1007 Oak Street project site in the City of Clayton. The objective of our work was to perform a geomorphic and engineering assessment of Mitchell Creek as it pertains to the proposed improvements at the project site. The potential affect of the proposed plan on the creek, and the risks to the proposed structure due to the creek have been evaluated. This letter summarizes our findings and provides documentation to support the initial study for the project.

**Introduction**

The Oak Street site is located the City of Clayton just south of the intersection of Clayton Road and Oak Street (Figure 1). The project proposes to remove two existing buildings and construct a mixed use complex including residences and office space, within walking distance of downtown Clayton and other commercial resources (Figure 2). Mitchell Creek is located immediately behind the proposed structure. There are existing buildings and paved surfaces on the site which come within 10 feet of the creek top of bank at some locations. The proposed plan will remove the existing buildings and paving, and construct a new structure positioned approximately 15 feet back from the top of the existing bank at most locations, with the shortest setback being approximately 13 feet, based on the site plan provided.

**Project Goals and Objectives**

Based on our discussions and field visit with Bob Staehle of Viz f/x, the fundamental goals of this hydrologic/geomorphic assessment project are the following:

1. Assess the characteristics and condition of the stream bed and banks, and identify concerns or impacts that may occur with respect to the proposed improvements;
2. Identify low-impact improvements that can be implemented to enhance the stability and condition of the creek at the site; and
3. Recommend measures that may be necessary to protect the structural integrity of the proposed building from creek-related impacts.

Mr. Nwakuche  
April 21, 2008  
Page 2

## Methods

Our approach to accomplishing the project objectives listed above involved the following tasks:

1. Review background data and available previous studies associated with flooding and geomorphology of the creek,
2. Visit the site to collect additional information that may be needed, and
3. Assess the geomorphic conditions, local hydraulic characteristics, and stability of the creek channel and banks, with particular emphasis on factors affecting the footing of the proposed building.

## Site Background and Condition

The watershed area of Mitchell Creek at the project site is 4.5 square miles (Figure 3. Source: FEMA, 2001<sup>1</sup>), an estimate that was verified previously in an analysis conducted by Balance staff in January 2008. The flood flows listed in the FEMA Flood Insurance Study for the creek at the project site are 1,090, 1,630, and 1,810 cfs for the 10- 50- and 100-year storm events, respectively. These storms can also be referred to as the 10-, 2-, and 1-percent chance annual storms. The 100-year flood boundary shown on the FEMA Flood Insurance Rate Map (FIRM) for the City of Clayton<sup>2</sup> extends across Oak Street, indicating that the project lots are within the 100-year special flood hazard area (Figure 4). Because we did not have information of the proposed pad or finished floor elevations, we did not verify whether they exceed the predicted water surface elevations in the FIRM map. This should be verified, however. The 100-year flood elevations appear to range from 399 to 395 at the project site based on the FIRM map (Figure 4)

The proposed project is located along Mitchell Creek approximately 320 feet upstream from the culvert beneath Clayton Road at the Oak Street intersection. A dilapidated wooden wall currently exists behind the project lots, with an undercut horizontal slab of grouted rip rap extending out a few feet from the base of one of the wall sections (Figure 5). The portion of the bank behind the upstream half of the existing upstream structure is heavily vegetated (Figure 6), while only isolated clusters of trees are presently established along the remaining portion of the project reach (Figure 7). No trees are established on the bank opposite of the proposed project, although a few occur on the top of the floodplain/terrace surface. A park exists adjacent to the creek downstream of the project. This park is a popular play area for children from a neighboring school, who were observed making small dams in the channel.

## Geomorphic Assessment

Present geomorphic conditions indicate a relatively stable stream bed, with a bottom composed of gravels and cobbles. The exposed banks are composed of a typical alluvium matrix of silt, sand, gravel and cobble, with the particle size increasing with depth from the surface. The banks behind the downstream lot appear to be more stable than the banks behind the upstream lot, which are vertical or undercut.

Despite the creeks apparent relative stability, there is clear evidence of recent channel migration and downcutting. The channel appears to have downcut roughly 1 to 1.5 feet over approximately the last 15 years based on the

---

<sup>1</sup> Federal Emergency Management Agency (FEMA), 2001, Flood Insurance Study (FIS) for the City of Clayton, California, Contra Costa County (Community number 060027V000), 17 p. +Figures.

<sup>2</sup> FEMA, 2001, Flood Insurance Rate Map for the City of Clayton, Community Panel 0600270001.

Mr. Nwaku  
April 21, 2008  
Page 3

level of the cobble-sized material bed material in the vertical bank profile and the elevation of the tops of the root masses of the trees on the banks behind the project lots (Figures 6 and 7). The channel appears to have downcut up to 3 feet over roughly a 30 to 40-year period based on the elevation of the root mass of the large trees downstream of the project (Figure 8) that appear to be buckeyes. The banks behind the upstream project lot are vertical and eroding, with undercutting in some locations (Figure 6). The grouted rip-rap slab is undercut as well, and could eventually fall into the creek.

Downstream of the site on the outside of the next bend, the creek flow is cutting behind the large two-trunked Valley Oak tree (Figure 8) and up under a chain link fence. The tree borders the creek bank on one side and is eroded approximately 60 degrees around on the upstream side, leaving only one third of area (root mass) around the trunk available to support the tree. The main cause for the erosion is the fact that the channel directs the flow into that location. The Valley Oak tree on the opposite bank contributes as well by blocking the right side of the channel at higher flows, and controlling the direction of the channel by fixing the location of the apex of the bend.

## Recommendations

The observations above provide fairly clear evidence that the channel has been downcutting and eroding into the banks behind the project lots over the last 10 or more years. Given that there is no clear cause for this erosion, other than that the eroding banks are located on the outside of a bend in the present channel form, the possibility that this trend may continue should be considered. It is recommended that the footings for the proposed structure be designed to withstand additional bank erosion or failure. If possible, extending the footings to bedrock would be most desirable. As mentioned in our field discussions, the installation of a subterranean retaining wall between the existing bank and the proposed building foundation could also be considered. This would allow the creek to erode into the natural/existing bank without creating an immediate risk to the proposed structures.

In the near term, there are some measures available to improve the stability of the creek banks. Typically banks are stabilized by grading them back to a stable 2 or 3 to 1 slope and vegetating them with native herbaceous and woody species. In this case, however, there is not adequate room available to grade the banks back, and the condition of the creek does not warrant this level of disturbance. Appropriate riparian trees could be planted along the bank behind the project lots, just above the ordinary high water mark, to help break up water velocities and anchor the bank material. Such a planting effort should be directed by a specialist familiar with the appropriate tree species, bioengineering techniques and the measures necessary to maximize the survivorship of the trees.

The condition of the banks should be monitored, particularly after large storm events, and if erosion becomes more severe, a more aggressive stabilization approach may be considered. Such an approach would involve work in the stream and the acquisition of the associated permits. Some possible measures could entail lining the toe of the right bank with large rocks or rock vanes, applying erosion control fabric, and vegetating with appropriate riparian trees and hydroseed. The rock vanes would direct flow away from the bank and towards the center of the channel. The opposite bank could be graded back into the terrace on the opposite side of the creek as well, although this would require excavation work, and the extent would be limited by the presence of a large and small oak tree pair in the middle of the terrace. A vegetated crib wall would also be an excellent means of stabilizing failing banks, and may be viewed more favorably by the regulatory agencies.

There are a few concerns related to trees immediately downstream of the project site. A senescing Valley Oak tree with a cracked overhanging trunk in the clearing north of the project area should be inspected by an arborist

Mr. Nwakuche  
April 21, 2008  
Page 4

and maintained. The tree on the outside of the downstream bend (that the creek channel is eroding around behind) is a minor concern as well. It currently poses little risk to the project, and is not put at risk by the project; however, it could eventually be undermined during an extreme storm event and fall in, which could result in loss of the tree and partial blockage of the channel. The erosion is also migrating upslope under the chain-link fence, creating a situation where children are climbing the fence to cross the gully. This site should therefore be monitored by the property owner, and addressed in the future if conditions deteriorate or if any mitigation to the stream is required.

The erosion would be best addressed by building the bank back out to re-establish the bend curvature, and reinforcing the bank-stream interface at the bend using a vegetated crib wall or anchoring the toe with large rocks. Rock vanes oriented upstream on the left (outer) side of the bend would be also help to direct flow inward towards the center of the channel and away from the bank. Grading the bank back to the left into the terrace opposite the downstream end of the project, as mentioned in paragraph 3 of this section, could also help to initiate the abrupt right hand bend earlier and direct the flow path across the erosion site as opposed to into it. As stated previously however, this would require substantial grading work, and the extent of work on the terrace would be limited by a large valley oak in the middle of the terrace.

### Closing

This assessment should provide the information and guidelines you need to proceed with the planning, design and permitting for the Oak Street mixed used project. Note that the conclusions and recommendations presented above are based on field observation only, and do not reflect quantitative engineering analyses or design. Assistance from an appropriate professional will be required to implement most of the measures described. Please feel free to contact me at your convenience if you have any questions or comments, or require further analyses.

Sincerely,

BALANCE HYDROLOGICS, Inc.

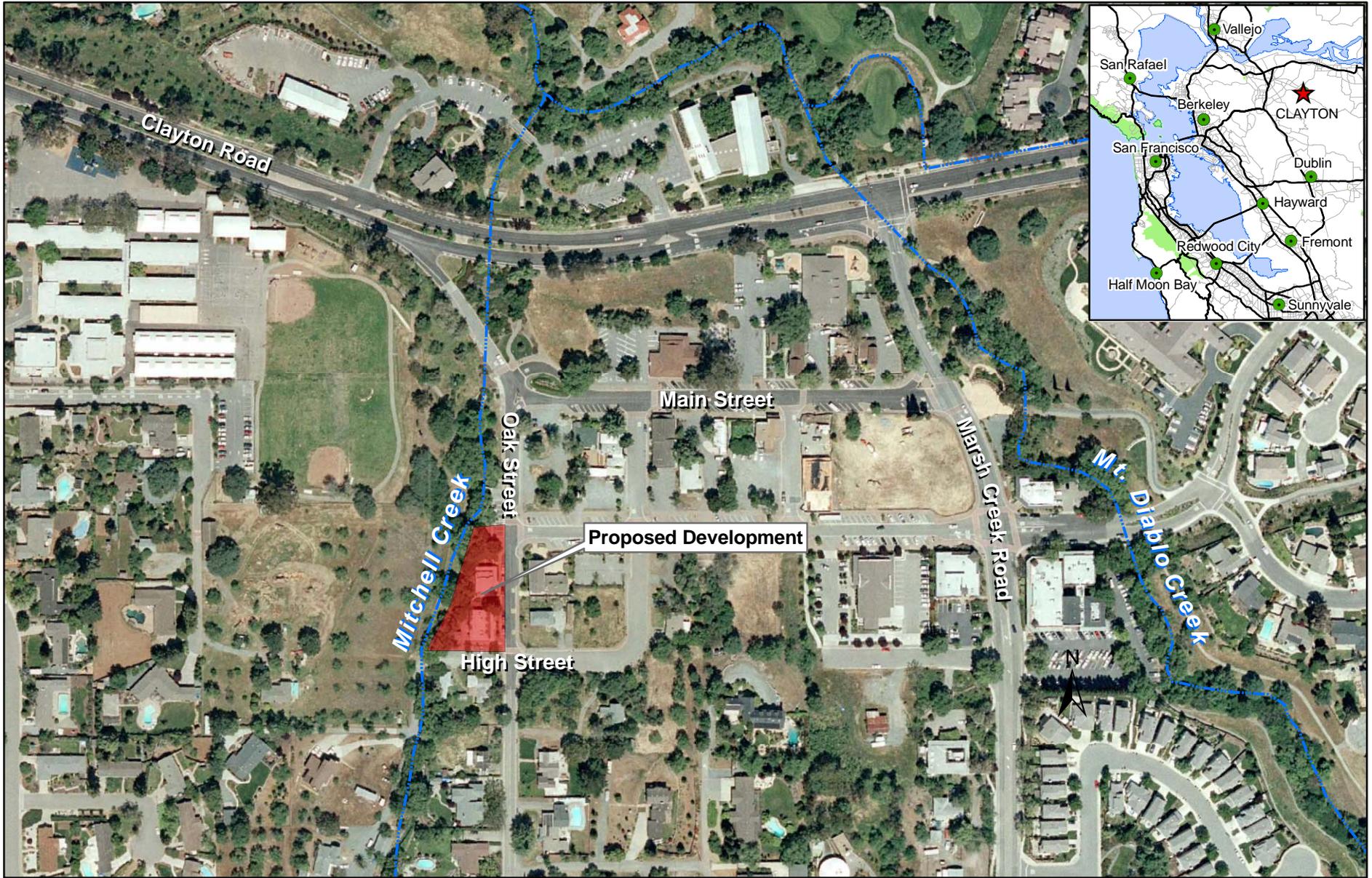


Greg Guensch, P.E.  
Engineer/Geomorphologist



### Enclosures:

- Figure 1. Location Map
- Figure 2. Site plan schematic
- Figure 3. Watershed map
- Figure 4. FEMA Flood Insurance Rate Map
- Figure 5. Photo of retaining wall behind lot (0670)
- Figure 6. Photo of eroding bank behind upstream lot (0667 point out root mass elevation)
- Figure 7. Photo of eroding bank behind downstream lot (0671 point out root mass elevation)
- Figure 8. Photo of eroding large trees downstream of project (0675)



Aerial photo courtesy of AirPhoto USA (April 1, 2007)

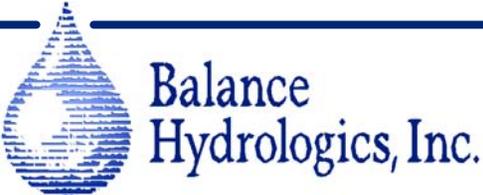


Figure 1. Location map for proposed Oak Street development in the City of Clayton, Contra Costa County, California.

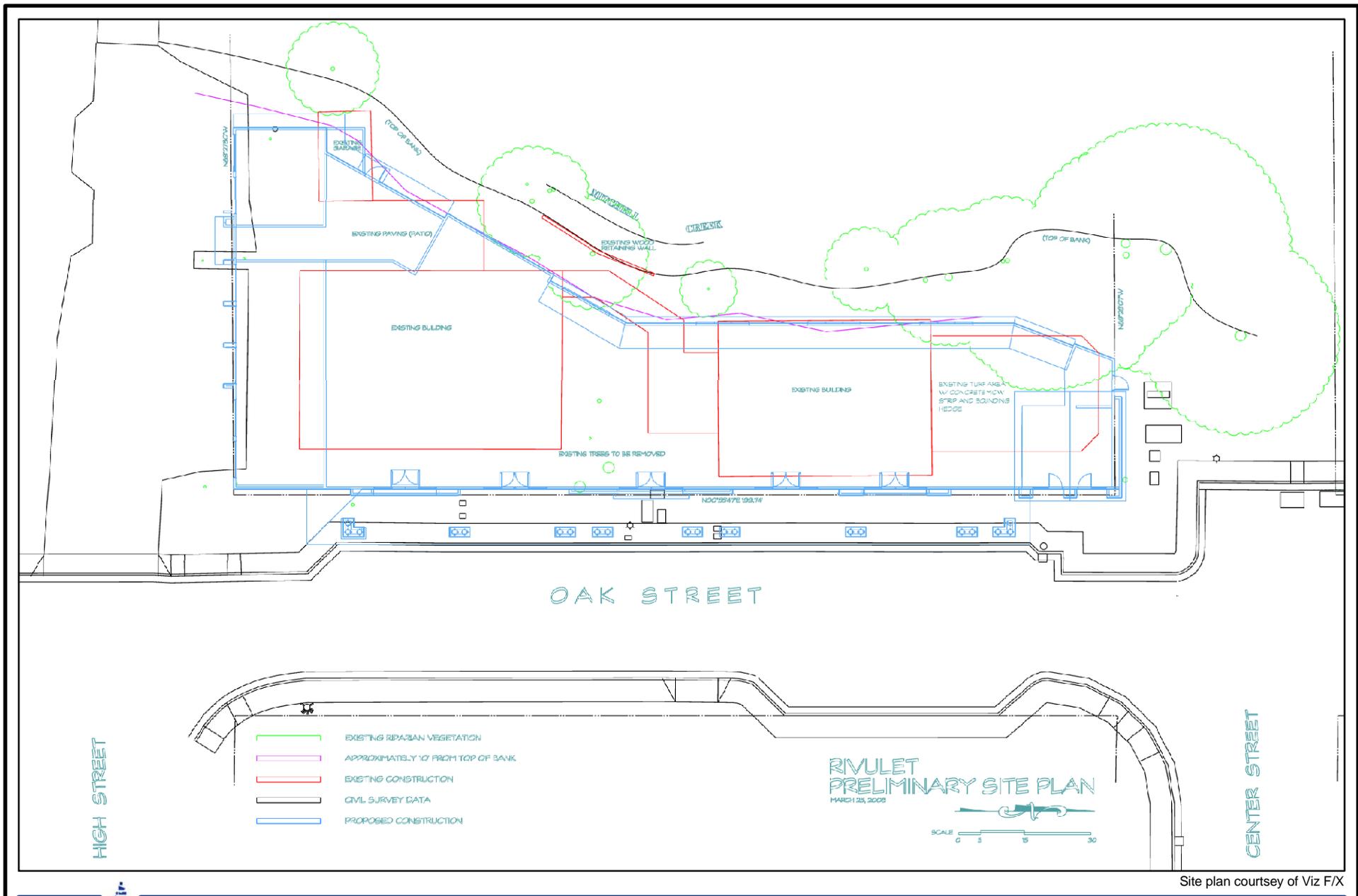
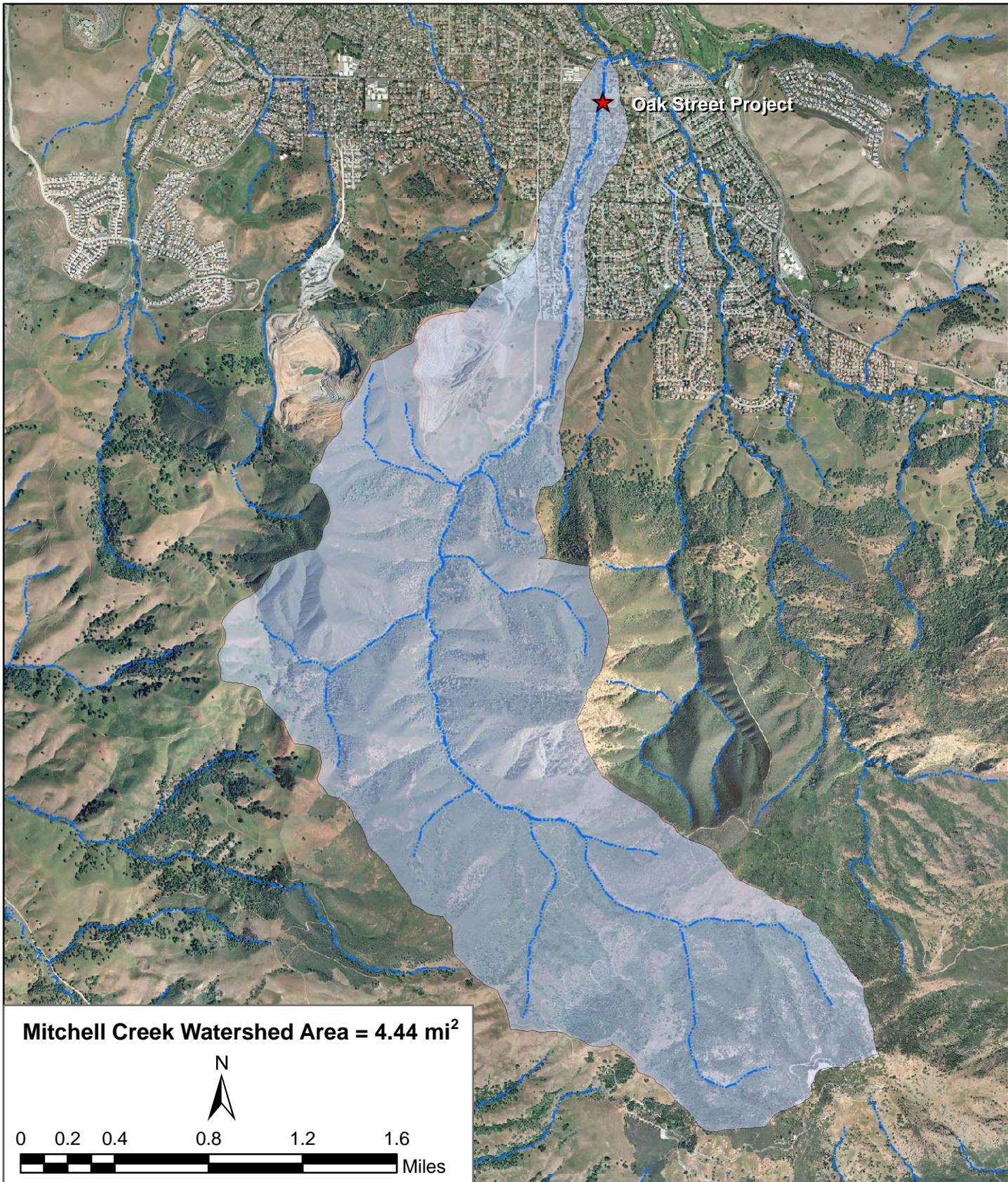
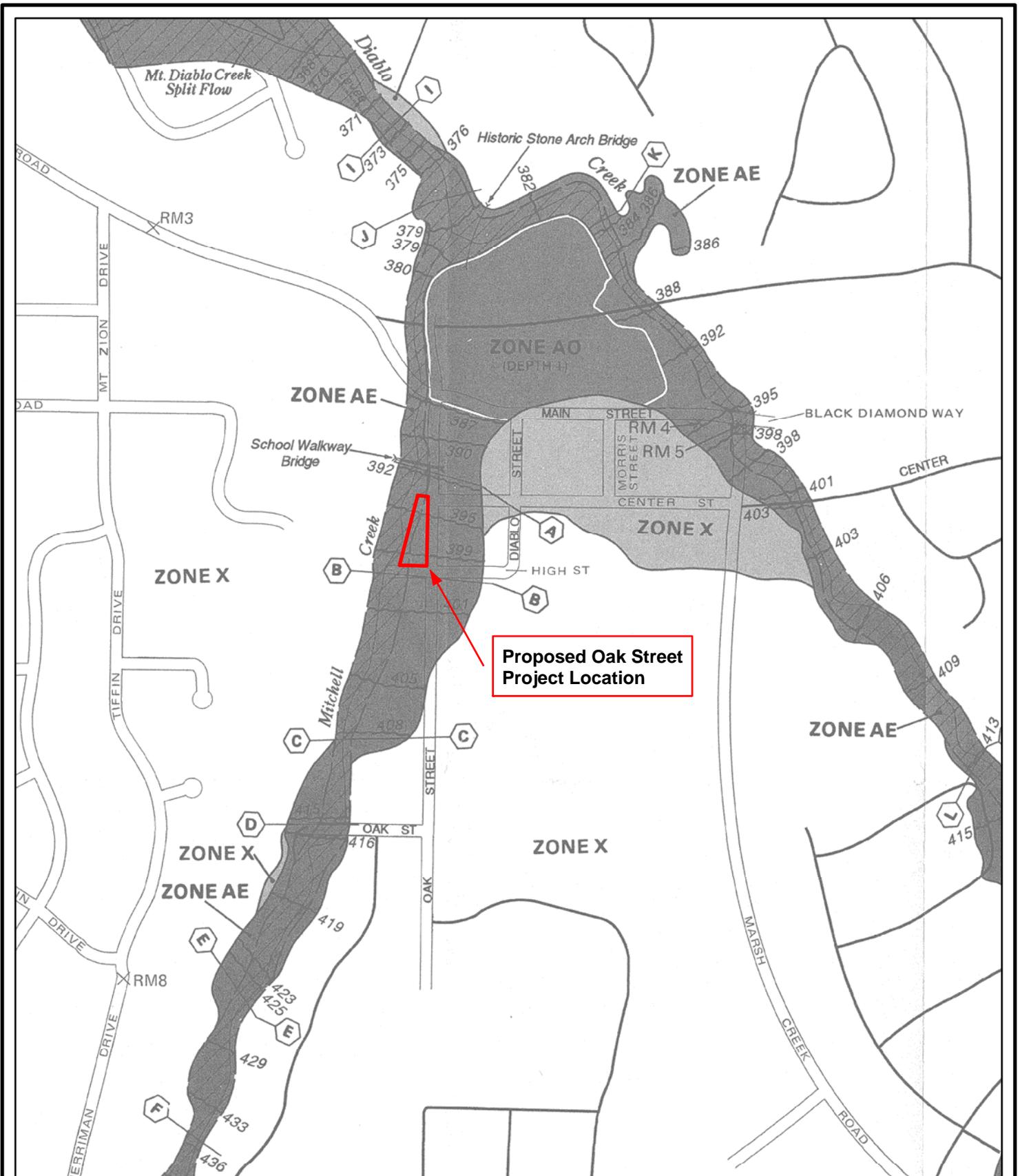


Figure 2. Rivulet preliminary site plan, City of Clayton, Contra Costa County, California.



**Balance  
Hydrologics, Inc.**

**Figure 3. Mitchell Creek watershed,  
Contra Costa County, California**



**Balance  
Hydrologics, Inc.**

**Figure 4. Flood insurance rate map for City of Clayton,  
Contra Costa County, California**

FEMA FIRM Community Panel 0600270001 C



Balance  
Hydrologics, Inc.

**Figure 5. Retaining wall and undercut concrete slab behind project site.**



Balance  
Hydrologics, Inc.

Figure 6. Eroding bank behind existing building on upstream end of site.



**Balance  
Hydrologics, Inc.**

**Figure 7. Eroding bank behind the existing building at the downstream end of site. This also shows the shortest existing setback from top of bank.**



**Balance  
Hydrologics, Inc.**

**Figure 8. Bank and channel erosion at the valley oak trees downstream of the project site.**

# **Appendix D**

**Tree Report by HortScience**

April 2008

# Tree Report

Rivulet

Clayton CA



**PREPARED FOR:**

Raney Planning & Management  
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Pleasanton CA 94566

April 2008

# **Tree Report**

Rivulet  
Clayton CA

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## **Attachments**

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***Tree Survey Map***

***Tree Survey Form***

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### ***Introduction and Overview***

Raney Planning & Management is preparing the environmental documents associated with re-development of the Rivulet site located in Clayton CA. Current site use consists of office buildings, parking and associated landscape. The City of Clayton requires that a **Tree Report** be prepared as part of project submittals. This report provides the following information:

1. A survey of trees currently growing on the site.
2. An assessment of the impacts of constructing the proposed project on the trees.
3. Recommendations for action.

### ***Survey Method***

Trees were evaluated in March 2008. The tree survey included trees within and immediately adjacent to the proposed project area and consisted of the following steps:

1. Tagging each tree greater than 6" in diameter with a numerically coded tag.
2. Identifying the tree as to species.
3. Measuring the trunk diameter (54" above grade).
4. Evaluating the health using a scale where 1 = poor and 5 = excellent condition.
5. Noting any significant structural characteristics including decay, poor crown conformation, dieback, history of failure, etc.
6. Assessing the tree's suitability for preservation.
7. Recording the tree's location on a map.

### ***Description of Trees***

Twenty-six (26) trees were evaluated, representing 11 species (Table 1, following page). Trees were a mix of native riparian vegetation (valley oak, Calif. buckeye, red willow), invasive weeds (tree of heaven) and planted landscape trees (coast redwood). The City of Clayton denotes several species of native trees as "protected". Among the surveyed trees, 12 met this criterion: 5 valley oaks (#272, 279, 287, 292, 294), 5 Calif. buckeyes (#271, 273, 274, 275, 276), and 2 Calif. black walnuts (#270, 278).

The valley oaks were located on the north side of the site. All were associated with the creek. Soil had been eroded away from the roots of trees #272 and 294 (Photo 1). The amount of exposed roots was significant in both cases. Tree #272 also leaned to the southeast with an asymmetric crown. I rated the tree's condition as poor for this reason.

**Photo 1.** Action of the creek had exposed roots of valley oaks #272 (red arrow) & 294.



**Table 1. Tree condition & frequency of occurrence. Rivulet. Clayton CA.**

Common name	Scientific name	Condition				No. of Trees
		Poor	Fair	Good	Excellent	
Calif. buckeye	<i>Aesculus californica</i>	1	2	2	--	5
Tree of heaven	<i>Ailanthus altissima</i>	2	2	--	--	4
Calif. black walnut	<i>Juglans hindsii</i>	1	1	--	--	2
Crape myrtle	<i>Lagerstroemia indica</i>	--	--	2	--	2
Mayten	<i>Maytenus boaria</i>	1	--	--	--	1
Evergreen pear	<i>Pyrus kawakamii</i>	--	--	--	1	1
Holly oak	<i>Quercus ilex</i>	--	--	1	--	1
Valley oak	<i>Quercus lobata</i>	1	2	2	--	5
Red willow	<i>Salix rubra</i>	--	1	--	--	1
Calif. pepper	<i>Schinus molle</i>	--	1	--	--	1
Coast redwood	<i>Sequoia sempervirens</i>	--	--	2	1	3
<b>Total</b>		<b>6</b>	<b>9</b>	<b>9</b>	<b>2</b>	<b>26</b>

Also surveyed were two small valley oaks (#279, 287). Both were young (9" and 5" respectively) and in good condition. Both were also close to existing structures. Valley oak #292 was located on the west bank of the creek. Its crown was bowed strongly toward the project area.



The 5 Calif. buckeyes were mature in development, concentrated near the creek on the north side of the project area (Photo 2). Condition ranged from poor (#274) to fair (#273, 276) to good (#271, 275). Trees in good condition had full crowns while others had asymmetric or leaning form. Buckeye #274 had long wounds that were decayed on its two main stems.

**Photo 2.** Calif. buckeyes were located along the creek & leafing out at the time of the survey.

Three tree of heaven were located on the project side of the creek. Two (#277, 284) were in the active channel due to failure of the bank. I rated the condition of these trees as poor. Tree #288 was located just off-site to the south. It and #285 were in fair condition.

Three coast redwoods (#281 – 283) were located between the two existing buildings along Oak Street (Photo 3). Two (#282, 283) were mature in development. Tree #282 was in excellent condition while #283 was good, due to a slight lean to the southeast and a thinner canopy. Redwood #281 was a small, somewhat suppressed, tree in good condition.



**Photo 3.** Looking north along Oak Street at coast redwoods.

No other species was represented by more than 2 trees including:

- Crape myrtles #289 and 290 located at the parking lot on the south side of the buildings. Both were in good condition and semi-mature in development.
- Calif. black walnut #270 was mature in development but largely dead. In contrast, walnut #278 was 6" in diameter and in fair condition.
- Red willow #293 was a mature tree located in the flow line of the creek. Its canopy extended into the project area. This tree was in poor condition with numerous branch failures.
- Calif. pepper #286 was an 8" tree growing out of the side of the creek bank. It was in fair condition with codominant trunks and a bowed crown.
- Evergreen pear #294 was a mature tree in excellent condition.

Descriptions of individual trees are found in the **Tree Survey Form (Attachments)**. Tree locations are referenced by tag number in the **Tree Location Map (also Attachments)**.

### ***Suitability for Preservation***

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in open fields, away from areas where people and property are present, the presence of structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider the potential for trees to grow and thrive in a new environment as well as their structural stability.

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Evaluation of suitability for preservation considers several factors:

- v **Tree health**  
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees. Trees at the subject site represented a range of overall health.
- v **Structural integrity**  
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. For example, valley oak #272 was failing at the base.
- v **Species response**  
There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, species such as Calif. black walnut are difficult to preserve. They rarely recover from injuries to the root system. In contrast, species such as coast redwood are more tolerant of site disturbance.
- v **Tree age and longevity**  
Old trees, while having significant appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- v **Species invasiveness**  
Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. Tree-of-heaven is a serious pest, spreading by seed and root suckers.

Each tree that was individually surveyed was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2 and **Tree Survey Form**).

**Table 2. Tree suitability for preservation. Rivulet. Clayton CA.**

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<b>Good</b>	Trees with good health and structural stability that have the potential for longevity at the site. Seven trees were rated as having good suitability including valley oaks #279 & 287, coast redwoods #282 & 283, crape myrtles #289 & 290 and evergreen pear #295.
<b>Moderate</b>	Trees with fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the “good” category. Five trees had moderate suitability for preservation including 3 Calf. buckeyes (#271, 275 & 276), coast redwood #281 and holly oak #280.

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**Table 2, continued. Tree suitability for preservation. Rivulet. Clayton CA.**

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<b>Poor</b>	Trees in poor health or with significant defects in structure that cannot be abated with treatment. Trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape plantings or be unsuited for use areas. Fourteen trees had poor suitability for preservation including 4 tree of heaven (#277, 284, 285, 288), 3 valley oaks (#272, 292, 294), 2 Calif. black walnuts *#270, 278) and 2 Calif. buckeyes (#273, 274).
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We cannot recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

***Evaluation of Impacts and Recommendations for Action***

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The tree survey was the reference point for tree condition and quality. Potential impacts from construction were evaluated using the site plan. The plan depicted the location of one new structure as well as parking. Details associated with grading and construction were not available. Tree trunk locations and canopy outlines were included.

The project would completely redevelop the site. All of the existing structures would be demolished and the site regraded. Impacts to trees would occur in several ways. Demolition of existing site improvements such as buildings, roads and parking lots may damage both tree roots and crowns. Grading may damage tree roots both directly through mechanical injury, and indirectly by altering soil structure, drainage, and biology.

Using the site plan, the potential impacts from construction were assessed for each tree. I recommend preservation of 10 trees and removal of 16 (Table 3). Included among trees recommended for preservation are valley oaks #272, 292 and 294, the 5 Calif. buckeyes, tree of heaven #288 and red willow #293.

Among the 16 trees recommended for removal are 9 trees located within or immediately adjacent to the footprint of the new building. Also included among trees recommended for removal are 7 with poor suitability for preservation.

In its current condition, valley oak #272 has a high potential for failure. The trunk leans strongly to the southeast and the canopy is horizontal in orientation, extending over the existing buildings and the proposed project area. The lean is so severe that the base of the trunk is outside the tree's dripline. There are horizontal cracks on the tension side of the trunk, an indication of that the lean is increasing. The root system is lifting out of the creek bed, in large part due to the erosion of soil.

I recommend preservation of this tree contingent upon a significant reduction in the size of the crown. The long southeast-facing scaffold limb should be removed. By such pruning, the failure potential would be reduced only slightly but the direction of fall should be changed, with the tree falling into the creek rather than buildings.

If crown reduction pruning is unacceptable, the prudent course of action would be to remove the tree. Such an action is independent of the proposed project. The tree is falling over. When it fails, it will hit the lawn area, benches, and building (whether existing or proposed).

**Table 3. Proposed action. Rivulet. Clayton CA.**

<b>Tree No.</b>	<b>Species</b>	<b>Trunk Diameter</b>	<b>Proposed Action</b>	<b>Comment</b>
270	Calif. black walnut	17,14	Remove	Poor suitability. Dying.
271	Calif. buckeye	16,14,12,8	Preserve	May require pruning
272	Valley oak	24,12	Preserve with pruning	Poor suitability. Retain only if crown is reduced size by 50%
273	Calif. buckeye	15,13,12	Preserve	Poor suitability
274	Calif. buckeye	6,6,4,3	Preserve	Poor suitability
275	Calif. buckeye	11,10,10	Preserve	May require pruning
276	Calif. buckeye	11	Preserve	May require pruning
277	Tree of heaven	5,5,3	Remove	Poor suitability
278	Calif. black walnut	6	Remove	Poor suitability
279	Valley oak	9	Remove	Within development area
280	Holly oak	9	Remove	Within development area
281	Coast redwood	6	Remove	Within development area
282	Coast redwood	29	Remove	Within development area
283	Coast redwood	30	Remove	Within development area
284	Tree of heaven	6,5,4,2	Remove	Poor suitability
285	Tree of heaven	6,6	Remove	Poor suitability
286	Calif. pepper	8	Remove	Poor suitability
287	Valley oak	5	Remove	Within development area
288	Tree of heaven	6,5,5,4,4,4,3,3,2	Preserve	Edge of project area
289	Crape myrtle	5	Remove	Impacts from development
290	Crape myrtle	6	Remove	Within development area
291	Mayten	6	Remove	Poor suitability
292	Valley oak	16,7	Preserve	Edge of project area; may require pruning
293	Red willow	32	Preserve	Edge of project area; may require pruning
294	Valley oak	23,18	Preserve	Edge of project area; may require pruning
295	Evergreen pear	13	Remove	Impacts from development

### ***Appraisal of Value***

The City of Clayton requires that the value of trees located on proposed developed sites be established and included as part of the **Tree Report** for bonding purposes. To establish these values, I employed the standard methods found in ***Guide for Plant Appraisal***, 9th edition (published in 2000 by the International Society of Arboriculture, Savoy IL). In addition, I referred to ***Species Classification and Group Assignment*** (2<sup>nd</sup> edition, 2005), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in the East Bay. The ***Species Classification and Group Assignment*** lists recommended species ratings and evaluations. Condition reflects the health and structural integrity of the trees prior to removal. The location factor considers the site, placement and contribution of the tree in its surrounding landscape.

Considering the four factors noted above, I established the value of the 26 trees recommended for preservation to be \$31,150 (Table 4):

### ***Tree Preservation Guidelines***

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Impacts to trees can be minimized by coordinating any construction activities inside the **TREE PROTECTION ZONE**. The following recommendations will help reduce impacts to this tree from development and maintain and improve their health and vitality through the clearing, grading and construction phases.

### **Design recommendations**

1. Plot the vertical and horizontal elevations of trees to be preserved on all plans.
2. Establish a **TREE PROTECTION ZONE** around each tree to be preserved. For design purposes, the **TREE PROTECTION ZONE** shall be 10' from the trunk on the project side and the dripline in all other directions.
3. Underground services including utilities, sub-drains, water or sewer shall be routed outside the **TREE PROTECTION ZONE**.
4. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.
5. Irrigation systems must be designed so that no trenching will occur within the **TREE PROTECTION ZONE**.

### **Pre-construction and demolition treatments and recommendations**

1. The demolition contractor shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.
2. Fence trees to be preserved to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link or equivalent as approved by consulting arborist.

**Table 4. Appraised value of surveyed trees. Rivulet. Clayton CA.**

<b>Tree No.</b>	<b>Species</b>	<b>Trunk Diameter</b>	<b>Appraised Value</b>
270	Calif. black walnut	17,14	\$550
271	Calif. buckeye	16,14,12,8	\$5,300
272	Valley oak	24,12	\$7,000
273	Calif. buckeye	15,13,12	\$2,500
274	Calif. buckeye	6,6,4,3	\$250
275	Calif. buckeye	11,10,10	\$2,600
276	Calif. buckeye	11	\$700
277	Tree of heaven	5,5,3	\$0
278	Calif. black walnut	6	\$250
279	Valley oak	9	\$1,900
280	Holly oak	9	\$1,750
281	Coast redwood	6	\$500
282	Coast redwood	29	\$13,700
283	Coast redwood	30	\$11,400
284	Tree of heaven	6,5,4,2	\$0
285	Tree of heaven	6,6	\$50
286	Calif. pepper	8	\$250
287	Valley oak	5	\$650
288	Tree of heaven	6,5,5,4,4,4,3,3,3,2	\$150
289	Crape myrtle	5	\$650
290	Crape myrtle	6	\$850
291	Mayten	6	\$150
292	Valley oak	16,7	\$3,700
293	Red willow	32	\$2,350
294	Valley oak	23,18	\$10,350
295	Evergreen pear	13	\$4,050

3. Trees to be preserved may require pruning to clean the crown of dead, dying, diseased and otherwise structurally unsound limbs as well as to provide clearance for construction. All pruning shall be completed by an ISA Certified Arborist or Tree Worker and adhere to the most recent edition of the American National Standard Institute's A300 and Z133 publications and the *Best Management Practices – Tree Pruning* prepared by the International Society of Arboriculture.

The crown of valley oak #272 shall be reduced in size by removing the large southeast-facing scaffold limb as well as other branches that extend to the east.

#### **Tree protection during construction**

1. Prior to beginning work, contractors working in the vicinity of trees to be preserved are required to meet with the Consulting Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.
2. Any grading, construction, demolition or other work that is expected to encounter tree roots should be monitored by the Consulting Arborist.
3. If injury should occur to the tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
4. Fences have been erected to protect trees to be preserved. Fences define a specific **TREE PROTECTION ZONE** for each tree or group of trees. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Consultant.
5. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.
6. Prior to grading, pad preparation, excavation for foundations/footings/walls, trenching, root pruning outside the **TREE PROTECTION ZONE** may be required. Roots shall be cut by manually digging a trench and cutting exposed roots with a saw, with a vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment. The Consulting Arborist will identify where root pruning is required.
7. All underground utilities, drain lines or irrigation lines shall be routed outside the **TREE PROTECTION ZONE**. If lines must traverse through the protection area, they shall be tunneled or bored under the tree as directed by the Consulting Arborist.
8. No materials, equipment, spoil, waste or wash-out water may be deposited, stored, or parked within the **TREE PROTECTION ZONE** (fenced area).
9. Any additional tree pruning needed for clearance during construction must be performed by a qualified arborist and not by construction personnel.

10. Spoil from trench, footing, utility or other excavation shall not be placed within the **TREE PROTECTION ZONE**, neither temporarily nor permanently.

**HortScience, Inc.**

James R. Clark, Ph.D.  
Certified Arborist WE-0846A  
Registered Consulting Arborist #357

## Attachments

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# HORTSCIENCE TREE SURVEY

**Rivulet project**  
 1005 & 1007 Oak Street  
 Clayton CA  
 March 2008

TREE No.	SPECIES	TRUNK DIAMETER (in.)	PROTECTED TREE?	CONDITION 1=poor 5=excellent	SUITABILITY for PRESERVATION	COMMENT
270	Calif. black walnut	17,14	Yes	1	Poor	Codominant trunks @ 4'; twig & branch dieback; history of branch failure; declining.
271	Calif. buckeye	16,14,12,8	Yes	4	Moderate	Mature tree; multiple attachments @ 3'; more canopy to E & a heavy lateral limb on that side.
272	Valley oak	24,12	Yes	3	Poor	Codominant trunks @ 1'; leaning & completely bowed flat to SE.; @ flow line with extensive exposed roots; lifting root plate; canopy hangs to 8'.
273	Calif. buckeye	15,13,12	Yes	3	Poor	Completely below #272; codominant trunks @ base, 2' & 5'; one-sided to S.
274	Calif. buckeye	6,6,4,3	Yes	2	Poor	Multiple attachments @ base; 8" & 6" have long wounds from base to 7'; other 2 stems bowed to creek.
275	Calif. buckeye	11,10,10	Yes	4	Moderate	Multiple attachments @ 4'; asymmetric form, mostly to S.; low canopy; 10' to corner of existing building.
276	Calif. buckeye	11	Yes	3	Moderate	Leans S.; basal wound; 8.5' to existing building with slight canopy overhang.
277	Tree of heaven	5,5,3	No	1	Poor	Codominant trunks @ base & 1'; in creek due to bank failure.
278	Calif. black walnut	6	Yes	3	Poor	Upper crown dead.
279	Valley oak	9	Yes	4	Good	Codominant trunks @ 5'; 7.5' from existing building; subordinate low codominant trunk.
280	Holly oak	9	No	4	Moderate	Codominant trunks @ 5'; bowed S. over building.
281	Coast redwood	6	No	4	Moderate	Below canopy of adjacent trees; small crown.
282	Coast redwood	29	No	5	Good	Grove of 2 trees.



# HORTSCIENCE TREE SURVEY

**Rivulet project**  
 1005 & 1007 Oak Street  
 Clayton CA  
 March 2008

TREE No.	SPECIES	TRUNK DIAMETER (in.)	PROTECTED TREE?	CONDITION 1=poor 5=excellent	SUITABILITY for PRESERVATION	COMMENT
283	Coast redwood	30	No	4	Good	Grove of 2 trees; slight lean SE.; thin upper canopy.
284	Tree of heaven	6,5,4,2	No	1	Poor	Multiple attachments @ base; in creek due to bank failure.
285	Tree of heaven	6,6	No	3	Poor	Edge of bank; codominant trunks @ 2'.
286	Calif. pepper	8	No	3	Poor	Codominant trunks @ 5'; edge of failing bank; bowed E. over shed.
287	Valley oak	5	Yes	4	Good	Good tree; 11' from shed; 2' from telephone pole.
288	Tree of heaven	6,5,5,4,4,4,3,3,3,2	No	3	Poor	Multiple attachments @ base; 2' from pavement.
289	Crape myrtle	5	No	4	Good	Good tree.
290	Crape myrtle	6	No	4	Good	Good tree; slightly asymmetric form.
291	Mayten	6	No	2	Poor	Multiple attachments @ 5'; bowed E.; extensive twig & branch dieback.
292	Valley oak	16,7	Yes	3	Poor	Opposite side of creek; mid-bank; codominant trunks @ base; bowed flat to E. over project area.
293	Red willow	32	No	3	Poor	Opposite side of creek; @ flow line; several low scaffolds have failed; canopy extends to project area; collapsing.
294	Valley oak	23,18	Yes	3	Poor	Opposite side of creek; extensive exposed roots; codominant trunks @ 2'; 23" slight bow to project area but with high canopy; 18" bowed flat away from it.
295	Evergreen pear	13	No	5	Good	Good tree; rounded crown.



# **Appendix E**

**Traffic Impact Study by Abrams Associates**

July 2008

# TRAFFIC IMPACT STUDY

# RIVULET MIXED USE PROJECT CITY OF CLAYTON

**Prepared for:**

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**Abrams Associates**  
TRAFFIC ENGINEERING, INC.

**JULY, 2008**

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## TRANSPORTATION AND CIRCULATION

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### INTRODUCTION

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This report describes the existing and future conditions for transportation and circulation both with and without the proposed project. The analysis provides information on local roadway networks, levels of service, and potential effects on the local transportation system associated with traffic generated by project. In addition, an assessment of the site access and parking conditions has been made.

### ENVIRONMENTAL SETTING

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The proposed mixed-use project includes 7 residential units located above 7,000 square feet of retail space in the Town Center area of the City of Clayton. The project is located on Oak Street between Center and High Streets. Off-street parking will be provided with approximately 14 garage spaces that would be accessed from the side of the project along High Street.

Implementation of the project would increase vehicular traffic in the area, which will affect traffic operations, particularly at critical intersections in the area. Figure 1 shows the project location and the study area that was included in the analysis. Figure 2 shows the project site plan. A discussion of the existing traffic and transportation conditions in the project study area is provided below.

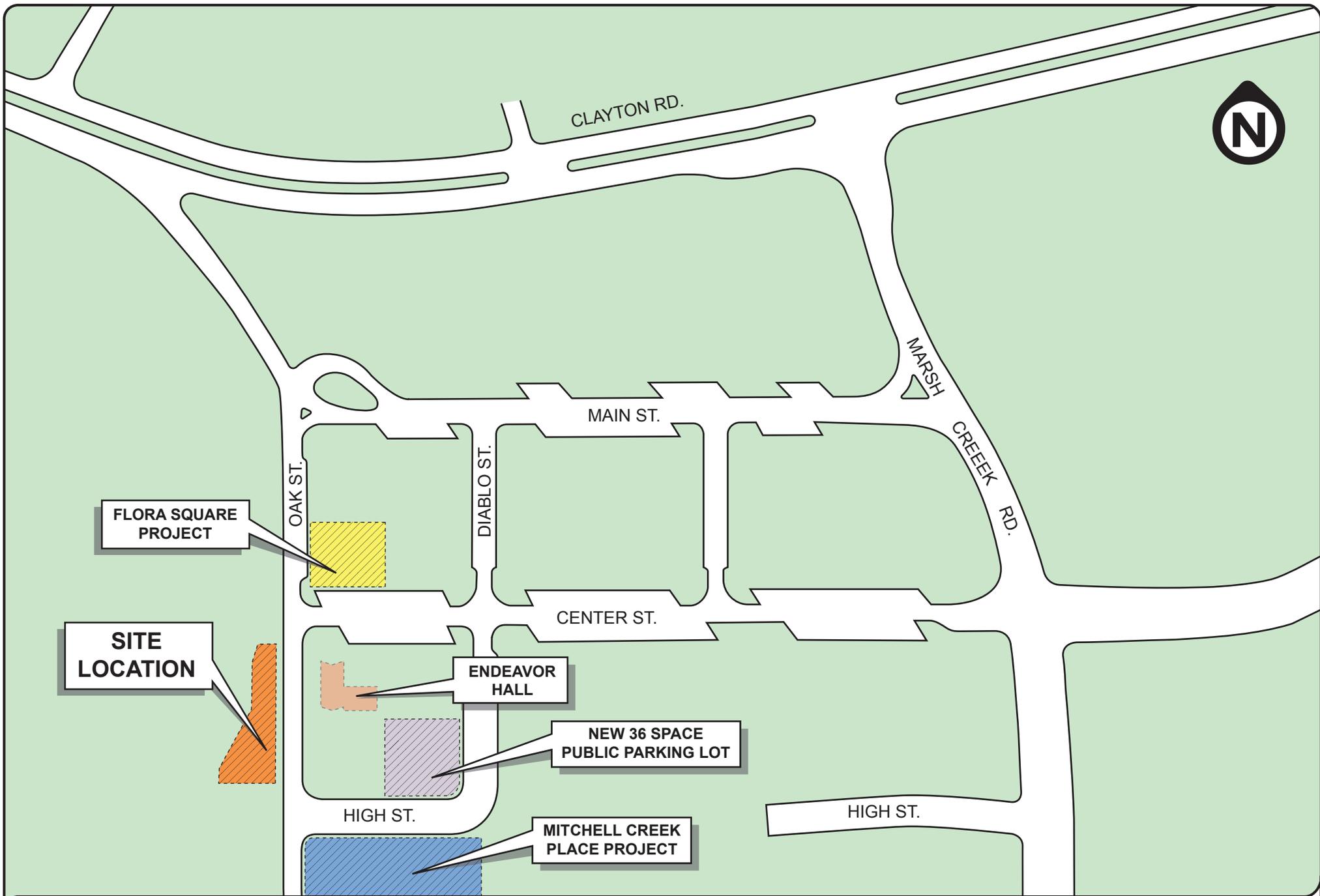
#### Existing Conditions

##### Land Use

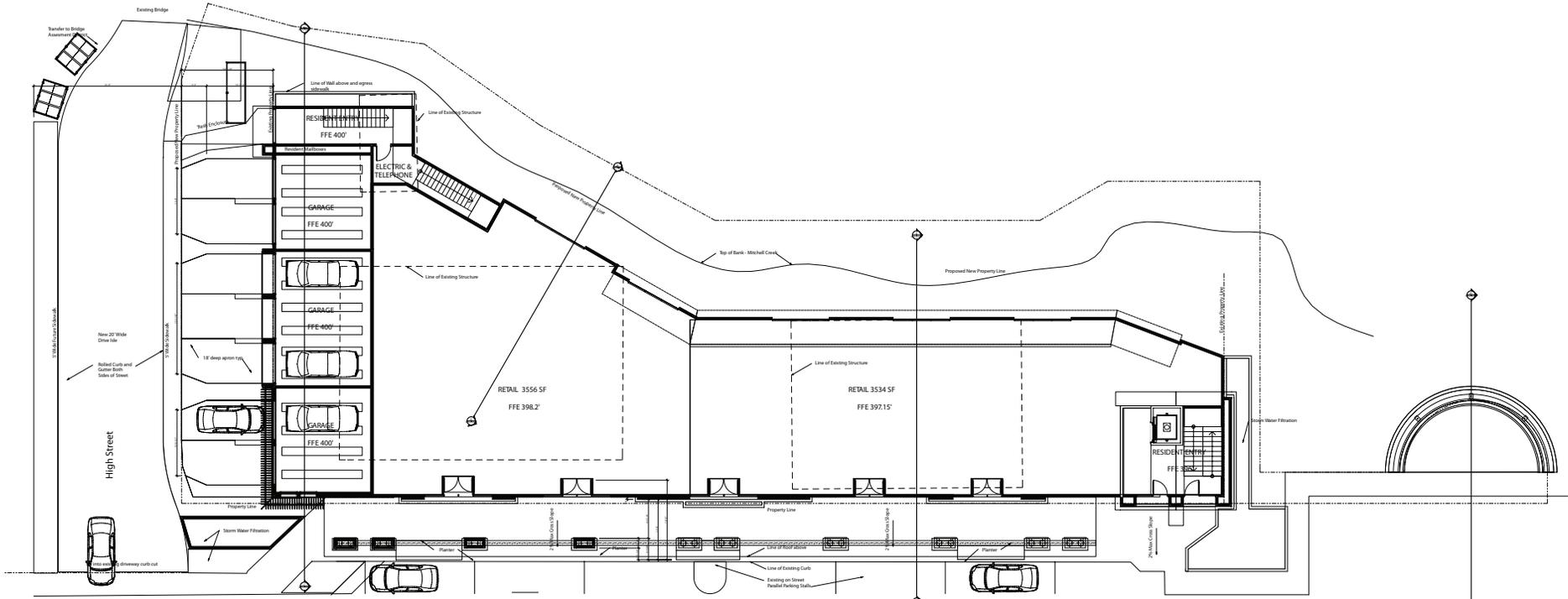
The project site is on the western edge of the town center area and is bounded on the west by Mitchell Creek. The site is adjacent to a pedestrian bridge across the creek and a trail that leads up to Mt. Diablo Elementary School. The project site has historically been used by businesses occupying two temporary buildings on the site.

##### Roadways

The existing roadways in the vicinity of the project site include Oak Street, Center Street, Diablo Street, Main Street and High Street. Each of these streets carries two lanes of traffic and has on-street parking. The major through traffic in the area is carried by nearby Clayton and Marsh Creek Roads.



**FIGURE 1 | PROJECT LOCATION AND STUDY AREA**  
 TRAFFIC IMPACT STUDY  
**Rivulet Mixed Use Project**  
 City of Clayton



Oak Street



**Rivulet Preliminary  
Architectural Site Plan**  
15 May 2008



**OPEN SPACE CALCULATIONS**

Lot Area = 17055 SF  
 Required Active Open Space = 1,705 SF  
 Provided:  
 Outdoor Private Decks = 43 SF  
 Outdoor Common Deck = 231 SF  
 Mini Park = 231 SF  
 Total Active Open Space Provided = 1,305 SF  
 Currently short by 202 SF

**PARKING CALCULATIONS**

**RESIDENTIAL**  
 Required:  
 7 Residential Units @ 1.5 spaces each = 10.5 spaces  
 7 Residential Units @ 0.5 garage spaces each = 3.5 spaces  
 Provided:  
 Garage stalls = 16  
 @ 560 sq ft = 8,960 sq ft  
 Total provided = 23

Required:  
 1000 SF Retail space @ 1 per 200 SF = 20 spaces  
 20% reduction per Item Center Agreement = 7 spaces  
 Provided:  
 7 Existing Parallel Spaces on Oak Street

**STORMWATER RETENTION CALCULATIONS**

**Impervious Surface Area Calculations:**  
 High Street Driveway = 1,140 SF (at grade @ 4% = 46 SF req)  
 High Street Sidewalk = 264 SF (at grade @ 4% = 11 SF req)  
 High Street Driveway = 2,025 SF (at grade @ 4% = 81 SF req)  
 Oak Street Sidewalk = 2,120 SF (at grade @ 4% = 85 SF req)  
 Building Foot = 8,600 SF (above grade @ 4% = 344 SF req)  
 Total Impervious Area = 15,149 sq ft = 626 SF Required Retention Surface Area

**Filtration Area Provided:**  
 High St. Oak Street above grade = 199 SF  
 High St. Oak Street at grade area = 55 SF  
 Oak Street at grade area = 248 SF  
 North Building above grade area = 843 SF  
 Total Filtration Provided = 645 SF

**FIGURE 2 | PROPOSED SITE PLAN**  
**TRAFFIC IMPACT STUDY**  
**Rivulet Mixed Use Project**  
 City of Clayton



Traffic Operations

All of the intersections in downtown Clayton are controlled by stop signs. The only nearby traffic signals are at the intersections of Clayton Road with Marsh Creek Road and with Center Street/Oakhurst Drive. Traffic volumes are low and can readily be accommodated by the existing street system. Speeds are limited by the intersection stop signs and the on-street parking maneuvers. There is also a considerable amount of pedestrian activity.

Existing Intersection Operations

Turning movement counts were used from previous traffic studies conducted for the Oak Center/Flora Square project. Each project study intersection was analyzed according to the methodology and standards set forth in the “Impacts and Mitigations” section. Existing intersection operations were evaluated for the weekday AM and PM peak hours at the study intersections as shown in Table 1. All signalized study intersections currently operate at acceptable levels-of-service (LOS) which is LOS D or better according to City and County standards. The stop-controlled intersections in the area operate with very low delay, and all operate at Level of Service “B” or better.

**Table 1  
Existing Level-of-Service Conditions**

INTERSECTION	CONTROL	PEAK HOUR		
			MEASURE	LOS
1 Oak Street and Center Street	Stop Sign	AM	4.1 sec/veh	A
		PM	4.3 sec/veh	A
2 Oak Street and High Street	Stop Sign	AM	7.1 sec/veh	A
		PM	7.0 sec/veh	A
3 Oak Street and Main Street	Stop Sign	AM	6.9 sec/veh	A
		PM	7.0 sec/veh	A
4 Center Street and Diablo Street	Stop Sign	AM	5.3 sec/veh	A
		PM	6.3 sec/veh	A
5 Center Street and Marsh Creek Road	Stop Sign	AM	9.9 sec/veh	A
		PM	9.6 sec/veh	A
6 Main Street and Marsh Creek Road	Stop Sign	AM	1.4 sec/veh	A
		PM	1.3 sec/veh	A
7 Clayton Road and Marsh Creek Road	Traffic Signal	AM	v/c = 0.33	A
		PM	v/c = 0.48	A

Transit Service

The County Connection provides some limited bus transit service in the area and has a bus line with nearby bus stops on Main Street and Marsh Creek Road that provide a connection to the Concord Bay Area Rapid Transit (BART) station. County Connection Route 110 operates on weekdays and Saturdays on about one hour headways.

### Pedestrian and Bicycle Conditions

It should be noted that as part of a detailed analysis of pedestrian safety in the vicinity of the project it was determined that it would be desirable to prepare a list of suggestions for improving safety at the school crosswalk across Oak Street at Center Street. This was also based on concerns that have been previously raised regarding the existing conditions at this school crossing. It was determined that although it would increase activity in the area the project itself would not result in any significant impacts on pedestrian safety at the crossing. As a result, a separate analysis of the school crossing on Oak Street has been prepared for the City to lay out the various safety improvement options that have been discussed and analyzed for this location.

Based on that analysis it was recommended that the signage at the crossing be improved and also that some minor reconfigurations be made to the head-in parking on the west side of Oak Street at Center Street. By eliminating just one parking space and relocating the handicapped space the visibility of pedestrians would be substantially improved, particularly for southbound motorists. In addition there were several other potential safety improvements considered including additional stop signs, speed bumps, and a raised crosswalk. It was recommended that speed surveys and further studies of the traffic volumes and the accident history be conducted before the City makes any final determination on whether or not these more extreme measures would be justified.

### **Baseline Conditions**

In order to provide a more accurate forecast of the impact of the project on traffic in the area an analysis was also conducted to determine the traffic that will be added from approved projects that could affect the study area such as the Flora Square and Mitchell Creek Place projects (which are both currently under construction). Figure 3 shows the Baseline traffic volumes that were used in this analysis. The baseline represents the traffic conditions that are forecast to exist once already approved projects (and other reasonably foreseeable projects) are completed and occupied. Table 1 shows the baseline LOS results.

### Baseline Roadway Improvements

The roadway network in Downtown is essentially complete. There are no major roadway improvements that are planned that will affect local traffic conditions.

### Baseline Intersection Operations

There are seven intersections in downtown Clayton that have been evaluated for the baseline scenario against the traffic standards established by the City. A summary of the LOS results are shown in Table 2. All of the intersections are well within the capacity standards when analyzed with the addition of baseline traffic. Traffic activity picks up significantly in the vicinity of the project just before school at the nearby Mount Diablo Elementary School starts at 8:00 AM and again after school around 2:30 PM.

**Table 2**  
**Baseline Level-of-Service Conditions**

INTERSECTION	CONTROL	PEAK HOUR		
			MEASURE	LOS
1 Oak Street and Center Street	Stop Sign	AM	4.2 sec/veh	A
		PM	4.5 sec/veh	A
2 Oak Street and High Street	Stop Sign	AM	7.1 sec/veh	A
		PM	7.1 sec/veh	A
3 Oak Street and Main Street	Stop Sign	AM	6.9 sec/veh	A
		PM	7.0 sec/veh	A
4 Center Street and Diablo Street	Stop Sign	AM	5.7 sec/veh	A
		PM	7.1 sec/veh	A
5 Center Street and Marsh Creek Road	Stop Sign	AM	10.4 sec/veh	B
		PM	10.0 sec/veh	B
6 Main Street and Marsh Creek Road	Stop Sign	AM	1.6 sec/veh	A
		PM	1.5 sec/veh	A
7 Clayton Road and Marsh Creek Road	Traffic Signal	AM	v/c = 0.43	B
		PM	v/c = 0.56	B

Many parents typically drop-off and pick up students from Mount Diablo Elementary School on Oak Street just north of the project site near Center Street. Although this is not an official school loading area it provides a convenient route for many students to access the school without taking the circuitous route around on Clayton Road. Although there can be some short-term congestion and delays caused by this impromptu loading area it appears to benefit the overall traffic operations in the area. The use of this access to the school reduces the amount of trips that need to head over and go left at the signal from Marsh Creek Road onto Clayton Road and then left again from Clayton Road onto Mitchell Canyon Road. Figure 3 shows the worst-case PM peak hour volumes in the area and Figure 4 shows the average daily traffic volumes for a typical weekday.

It should be noted that as part of a detailed analysis of pedestrian safety in the vicinity of the project it was determined that we should prepared a list of suggestions for improving safety at the crosswalk across Oak Street at Center Street. This was also based on concerns that have been raised regarding existing conditions at the school crossing on Oak Street. It was determined that although it would increase activity in the area the project itself would not result in any significant impacts on pedestrian safety at the crossing. As a result, a separate analysis of the school crossing on Oak Street has been prepared for the City to lay out the safety improvement options that have been discussed and analyzed for this location.

## **REGULATORY CONTEXT**

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Existing policies, laws and regulations that would apply to the proposed project are summarized below.



**FIGURE 3 | PM PEAK HOUR TRAFFIC VOLUMES**  
 TRAFFIC IMPACT STUDY  
**Rivulet Mixed Use Project**  
 City of Clayton



**FIGURE 4 | TYPICAL AVERAGE WEEKDAY TRAFFIC**  
 TRAFFIC IMPACT STUDY  
**Rivulet Mixed Use Project**  
 City of Clayton

### Contra Costa County Transportation Authority

The Contra Costa Transportation Authority (CCTA) serves as the Congestion Management Agency (CMA) for Contra Costa County. CCTA adopted the county's first Congestion Management Program (CMP) in October 1991. The most recent CMP update represents the fifth biennial update that the Authority has prepared.

### Measure C

The overall goal of the CCTA Growth Management Program (GMP) called for in Measure C-1988 is to "achieve a cooperative process for Growth Management on a countywide basis, while maintaining local authority over land use decisions and the establishment of performance standards." Using a formula based on road miles and population, CCTA allocates 18 percent of the sales tax revenues it receives to local jurisdictions that comply with GMP requirements. Clayton participates in the Measure C program as a member of the Transpac committee, which consists of Clayton, Concord, Martinez, Pleasant Hill, Walnut Creek and Contra Costa County.

### City of Clayton General Plan Policies

The Transportation and Circulation Element included in the General Plan is prepared pursuant to Section 65302(b) of the California Government Code, and has been a mandatory component of local General Plans since 1955. The Transportation and Circulation Element is required to address the location and extent of existing and planned transportation routes, terminals, and other local public utilities and facilities. The proposed project does not appear to conflict with any of the goals or policies set forth in this document.

## **STANDARDS OF SIGNIFICANCE**

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Based on the adopted policies of CCTA, the City of Clayton, and Contra Costa County a traffic impact would be considered significant if any of the following conditions, or potential thereof, would result from implementation of the proposed project.

- Substantially increased traffic volumes in relation to existing traffic load and capacity of the street system;
- A decline in LOS at a signalized intersection to unacceptable Level E ( $V/C = 0.90$ ) or lower;
- A decline in LOS at an unsignalized intersection to unacceptable level - LOS E (Average Delay = 35 seconds) or lower;
- An unsignalized intersection is forecast to meet the warrants for installation of a traffic signal, as set forth by Caltrans;
- Failure of any street or portion of a street to meet accepted safety and design standards or guidelines;
- Failure to meet adopted alternative transportation policies, plans, or programs.
- Inadequate access for emergency vehicles.

## **METHODOLOGY**

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Abrams Associates Traffic Engineering, Inc. conducted an analysis of traffic impacts for the project. The analysis is intended to quantify the traffic impacts of the project and to address any circulation and roadway improvements needed to mitigate these impacts. The analysis, summarized herein, addresses traffic conditions occurring during the morning and evening peak hours, and the area studied encompasses all of the major intersections that would be affected by the proposed project. The analysis considers the project's impacts on the baseline traffic conditions as well as conditions occurring in the future under the City of Clayton and Contra Costa County General Plans.

### Intersection Capacity Analysis

The level of service (LOS) measurement is a qualitative description of traffic operating conditions for intersections and roadways. Levels of service describe these conditions in terms of such factors as speed, travel time, delays, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. Levels of service are given letter designations ranging from A to F, which are defined for signalized intersections in Table 3. The LOS measurement is used to determine the significance of any impacts a project might have on traffic and circulation. Separate methodologies are used to determine levels of service at signalized and unsignalized intersections.

#### *Signalized Intersections*

The operating conditions at the signalized study intersections were evaluated using the most recent 1995 update of the Contra Costa County Transportation Authority's CCTALOS Program (Version 2.35). The LOS definitions for signalized intersections are included in Table 2. This is the intersection analysis methodology currently required by the CCTA. This program uses the TRB (Transportation Research Board) Circular 212 methodology to analyze the operations at signalized intersections based on the utilization of intersection capacity

#### *Unsignalized Intersections*

For unsignalized intersections the methodology set forth in Chapter 10 of the 2000 Highway Capacity Manual was used. This methodology is based on average total delay (seconds/vehicle). The HCM analysis was conducted using Traffix 7.7 and the level-of-service calculations are included in the appendix to this report.

As with signalized intersections, there are six levels of service for unsignalized intersections, A through F, which represent conditions from best to worst, respectively. Table 4 shows the corresponding average total delay per vehicle at unsignalized intersections for each LOS category from A to F.

**Table 3**  
**Level of Service for Signalized Intersections**

The **2000 HIGHWAY CAPACITY MANUAL** methodology for analyzing signalized intersections measures the performance by the control delay per vehicle in seconds. The **CRITICAL MOVEMENT ANALYSIS METHODOLOGY**<sup>1</sup>, required by the CCTA is described in Transportation Research Board's Circular 212, defines Level of Service (LOS) for signalized intersections in terms of the ratio of critical movement traffic volumes to an estimate of the maximum capacity for critical volume at an intersection. Critical movements at an intersection are calculated by determining the maximum traffic volumes for conflicting traffic movements (i.e., left-turns plus opposing through traffic) per single stream of traffic (by lane). For the Critical Movement Methodology the LOS for intersections is determined by the ratio of critical movement volume to critical movement capacity (volume-to-capacity ratio = V/C) for the entire intersection. Six categories of LOS are defined, ranging from LOS "A" with minor delay to LOS "F" with delays averaging more than 40 seconds during the peak hour.

Level-of-Service		Description
LOS "A"	V/C Range	0.0 - 0.60
	Average Stop Delay (seconds)	0.0 - 10.0
LOS "B"	V/C Range	0.61 - 0.70
	Average Stop Delay (seconds)	10.1 - 20.0
LOS "C"	V/C Range	0.71 - 0.80
	Average Stop Delay (seconds)	20.1 - 35.0
LOS "D"	V/C Range	0.81 - 0.90
	Average Stop Delay (seconds)	35.1 - 55.0
LOS "E"	V/C Range	0.91 - 1.00
	Average Stop Delay (seconds)	55.1 - 80.0
LOS "F"	V/C Range <sup>2</sup>	
	- Measured	1.00 or less
	- Forecast	1.01 or more
	Average Stop Delay (seconds)	> 80

<sup>1</sup> Source: "Planning Level Methodology - Signalized Intersections" *Circular 212*, Transportation Research Board, Washington D.C., January, 1980

<sup>2</sup> While forecast demands can exceed maximum capacity, actual measured volumes theoretically cannot. Since traffic inefficiencies arise at capacity demand conditions, the calculated V/C ratios for LOS "F" conditions can be substantially below a V/C of 1.00.

**Table 4**  
**Level-of-Service for Unsignalized Intersections**

<b>Level of Service (LOS)</b>	<b>Ave Total Delay (sec/veh)</b>	<b>Traffic Condition</b>
A	< 10	No Delay
B	>10 - 15	Short Delay
C	>15 – 25	Moderate Delay
D	>25 – 35	Long Delay
E	>35 – 50	Very Long Delay
F	> 50	Volume>Capacity

## **IMPACT ANALYSIS**

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### **Project Trip Generation**

Trip generation is defined as the number of one-way vehicle trips produced by a particular land use or study site. Trips generated by this project were estimated using the rates contained in *Trip Generation, Seventh Edition*, published by the Institute of Transportation Engineers.

The trip generation characteristics for a small project such as this can vary considerably depending on the specific tenants in the building. The Project would have a maximum daily trip generation of about 368 trips per day (ADT). The peak hour traffic would amount to 33 vehicle trips, with about 17 trips inbound, and 16 trips outbound during the peak hour. The trip generation data is summarized in Table 5.

This number of trips is well below the established threshold where a detailed traffic analysis would be required. Generally, an individual signalized intersection would require a minimum of 50 trips per hour before the differences in traffic capacity need to be measured. For this project, the trips will be spread out onto several roadways so it would not result in a significant increase in the existing volumes on any one roadway.

**Table 5**  
**Project Trip Generation**  
**Rivulet Project – City of Clayton**

Land/Use	ITE Trip Generation						
	Daily Trips	AM Peak Hour (8:00-9:00 AM)			PM Peak Hour (5:00-6:00 PM)		
		In	Out	Total	In	Out	Total
General Retail (Trip rate per 1000 sq ft)	42.9	0.63	0.40	1.03	1.80	1.95	3.75
Trip Generation from Project (7,000 sq ft)	301	4	3	7	13	14	26
Housing – Market Rate (Trip rate per dwelling unit)	9.57	0.19	0.56	0.75	0.64	.037	1.01
Trip Generation from 7 units	67	1	4	5	4	3	7
<b>Total Project Trips</b>	<b>368</b>	<b>6</b>	<b>7</b>	<b>12</b>	<b>17</b>	<b>16</b>	<b>33</b>

The addition of 368 vehicle trips per day to Oak Street or High Street would not create a substantial increase in the number of trips in the area. It should also be noted that this estimate should be considered conservative because many of the potential trips to the retail portion of the project may come from existing trips in the area. Normally a 34% percent reduction to the retail trips would be taken to account for “pass-by” trips (project trips that would already be present as part of the existing traffic volumes in the area). However, to provide a conservative review of the project trips and to account for other potential tenants (such as medical office space) no pass-by reductions were applied.

Trip Distribution and Assignment

Trip distribution is the process of determining in what proportion vehicle trips will travel between different locations within a traffic study area. Trip assignment is the allocation of vehicle trips to available routes (local streets) between locations in the traffic study area. Traffic was distributed to the roadway system manually based on existing travel patterns. Future traffic generated by approved and buildout developments was distributed and assigned to the local street system using information from the City of Clayton and Contra Costa County General Plans.

## **Baseline Plus Project Traffic Conditions**

### Roadway Improvements Assumptions

Based on information provided by the City and data contained in the General Plan, there are no significant roadway improvements planned for downtown Clayton or any other roadways in the study area. All of the local downtown streets will remain as two-lane streets with on-street parking permitted. This project, by itself, will not have a significant traffic impact, and will not require any specific traffic mitigation measures or roadway improvements.

### Other Planned Development in Downtown Clayton

It is assumed that the Mitchell Creek Place and the Flora Square projects will have been completed and will be generating additional traffic in the area. In addition, a five percent increase in traffic has been assumed to account for the growth in traffic that has occurred since the last traffic counts were taken.

### Intersection Operations

The analysis of intersection operations in the area indicates the project would not cause any significant impacts on traffic operations at any nearby intersections. The level of service results shown in Table 1 would remain unchanged. The detailed calculations are included in the appendix.

### Intersection Signalization Needs

Traffic signals are used to provide for an orderly flow of traffic through an intersection. Many times they are needed to provide side street traffic and opportunity to access a major road where high volumes and/or high vehicle speeds block crossing or turn movements. They do not, however, necessarily increase the capacity of an intersection (i.e., increase the intersection's ability to accommodate additional vehicles). There are no intersections in downtown Clayton that are candidates for the installation of traffic signals.

## **Cumulative Plus Project Traffic Conditions**

The Cumulative (2030) traffic volumes with the addition of traffic from the proposed project have been reviewed at each of the project study intersections. Assuming the existing transportation network is maintained all intersections are forecast to continue to have acceptable operations. A summary of the Cumulative LOS results is shown in Table 6. All intersections are forecast to have acceptable operations (LOS D or better) under Cumulative conditions and the proposed project would not cause any changes to the level-of-service results. In general, the proposed project would be expected to have a relatively small effect on cumulative traffic conditions. The amount of traffic generated is essentially negligible once it is distributed out onto the various roadways in the area. In addition, the proposed project does not involve a change in zoning and therefore the project

would not be expected to generate substantially more traffic than what has been previously assumed for the site.

**Table 6**  
**Cumulative Level-of-Service Conditions**

INTERSECTION	CONTROL	PEAK HOUR	Cumulative No Project		Cumulative With Project	
			MEASURE	LOS	MEASURE	LOS
1 Oak Street and Center Street	Stop Sign	AM	4.3 sec/veh	A	4.3 sec/veh	A
		PM	4.7 sec/veh	A	4.7 sec/veh	A
2 Oak Street and High Street	Stop Sign	AM	7.1 sec/veh	A	7.1 sec/veh	A
		PM	7.1 sec/veh	A	7.1 sec/veh	A
3 Oak Street and Main Street	Stop Sign	AM	6.9 sec/veh	A	6.9 sec/veh	A
		PM	7.1 sec/veh	A	7.1 sec/veh	A
4 Center Street and Diablo Street	Stop Sign	AM	6.0 sec/veh	A	6.0 sec/veh	A
		PM	7.9 sec/veh	A	7.9 sec/veh	A
5 Center Street and Marsh Creek Road	Stop Sign	AM	12.8 sec/veh	B	12.9 sec/veh	B
		PM	11.7 sec/veh	B	12.1 sec/veh	B
6 Main Street and Marsh Creek Road	Stop Sign on Main Street	AM	1.8 sec/veh	A	1.8 sec/veh	A
		PM	1.6 sec/veh	A	1.6 sec/veh	A
7 Clayton Road and Marsh Creek Road	Traffic Signal	AM	v/c = 0.48	B	v/c = 0.48	B
		PM	v/c = 0.61	B	v/c = 0.62	B

### Parking

The City of Clayton zoning code calls for two off-street parking spaces for each residential unit and one space for each 400 square feet of retail space as specified in the Town Center Parking Study<sup>3</sup>. Table 7 shows the required parking for the project according to City standards and Table 8 shows the off-street parking proposed as part of the project. As seen in this table the project would be expected to require 14 off-street spaces for the upper level residential units and also 18 parking spaces for the proposed ground floor retail space. It should be noted that a 75% waiver of the City parking standards for the ground floor space is permitted as part of the City's plan to encourage retail uses in the Town Center area.

**Table 7**  
**Town Center Parking Requirements for the Project**

Development	Size	Trip Rate	Parking Spaces
General Retail (1 <sup>st</sup> Floor)	7,000 sq ft	2.5 per ksf	18
Town Center Parking Waiver (75% reduction)			-14
Residential	7 units	2 per unit*	14
<b>Total</b>			<b>18</b>

\* Note: This includes 1.5 spaces per unit plus 0.5 guest spaces per unit.

<sup>3</sup> Town Center Parking Study, SAS Planning Consulting, Davis, CA, May 2006.

**Table 8**  
**Proposed Off-Street Parking for the Rivulet Project**

<b>Project Component</b>	<b>Parking Spaces</b>
General Retail (1 <sup>st</sup> Floor)	0
Residential (Parking Garages for Residents)	14
Residential (Guest Parking Spaces)	7
<b>Total</b>	<b>21</b>

For comparison a conservative estimate of the parking demand for the project has been made based on the data in the ITE Parking Generation Manual. As mentioned previously, the project will involve 7,000 square feet of retail space along with seven (7) residential units. The parking demand estimates in Table 6 are based on the “General Retail/Shopping Center Land Use” (Category 820) for the first floor, and the residential rate for the seven (7) housing units. This calculation is shown in Table 9. The parking calculations based on ITE rates result in a parking demand for 36 spaces.

**Table 9**  
**Maximum Parking Demand for the Project**

<b>Development</b>	<b>Size</b>	<b>Rate per 1,000 sq ft</b>	<b>Parking Spaces</b>
General Retail (1 <sup>st</sup> Floor)	7,000 sq ft	3.23	22
Residential	7 units	2 per unit	14
<b>Total</b>			<b>36</b>

The parking demand for this project will likely be lower due to its location within the Town Center area and the effects of shared parking. For another comparison, the parking from a small mixed-use project of this size could also be based on a peak parking rate for downtown type commercial-retail uses that typically have a parking generation rate of about 2.8 spaces per 1,000 sq ft for retail. For comparison, the City of Walnut Creek requires 3.3 spaces per 1000 square feet for all uses in the downtown area. For residential uses about 1.3 spaces per unit is what is normally required for downtown developments. If the calculation assumes a more urban/downtown setting then the estimated demand would be about 29 parking spaces for the project.

With the currently proposed 21 off-street parking spaces for the residential units the proposed project is expected to meet the City’s requirements but is expected be about 15 spaces short of the demand according to ITE Rates. Based on the most comparable Walnut Creek rates the project would be expected be about 8 spaces short of its likely demand. Any additional parked vehicles generated could be readily accommodated by the available on-street and public parking in the Town Center area without increasing the parking occupancy rates in the area by more than 3% percent (based on the existing supply). At build-out the Town Center area is anticipated to have up to 1,100 on-street and public parking spaces available. While the use of on-street parking would increase on the blocks closest to the project, the vehicles from the proposed project would increase the overall downtown parking occupancy levels by less than 2 percent.

The project is proposing to maintain the existing parallel parking along it's frontage on Oak Street so the on-street parking supply would not be affected by the proposed project. It should also be noted that there should be no problems with vehicles occasionally backing out from the garages or guest spaces onto High Street adjacent to the project. Adequate space has been provided to allow vehicles to maneuver in and out of the guest parking spaces as per standard parking design guidelines. For comparison, the same amount of space is available as would normally be required for a two-way parking aisle with 90 degree parking. It is our understanding that there are only about four residential units further to the west on High Street and that in the future no more than one more single-family residential dwelling would likely be allowed under the current zoning. This would only generate an additional one to two trips during the peak hours. However if, as a worst case scenario another ten residential units were added beyond the project on High Street there would still not be any conflicts or problems expected with through traffic. This would result in a total of about 15 vehicles per hour which equates to about one car every four minutes.

Access to properties to the west of the site will need to be maintained so it is assumed that this section of High Street will continue to have one lane in each direction with a roadway width of at least 20 feet adjacent to the project. The maximum possible traffic generation of the properties with access to High Street (west of the project) was reviewed and it was verified that this would not change any of the conclusions in this report. Since there are no plans to make High Street a through connection to Mitchell Canyon Road the proposed 20 foot traveled way would be sufficient to serve all future development that might occur there.

It should be noted that the presence of parked vehicles along the project frontage would not be considered a problem for the sight distance for eastbound High Street. These parking spaces are properly located and should remain in their current configuration (which is not an unusual condition). The potential for landscaping or trees to reduce the sight distance would not be considered a significant impact since City sight distance regulations would prohibit this from occurring. On the project's corner at Oak Street and High Street all landscaping would need to be kept below 2 feet and all trees would need to be limbed up to at least 8 feet. As long as the City's corner sight distance requirements are not violated there should not be any project impacts on sight distance.

#### On-street parking conditions

The City of Clayton currently has about 218 on-street parking spaces in the downtown area. About 110 of these spaces are located within two blocks of the site. At the current time, the occupancy of these spaces is about 65 percent at times when the downtown is active and reaches a maximum of about 80 percent on the busiest weekend evenings. The *Town Center Parking Study* (SAS Planning and Consulting, May 2006) contains a complete inventory of all downtown parking in Clayton, and a detailed assessment of parking supply and demand.

### Clayton Parking Policies

The *Town Center Parking Study* contains a number of recommendations that would affect the parking conditions for the project. These include:

- For parcels of less than 10,000 square feet, there would be a 100% waiver of the parking requirements on-site. For parcels greater than 10,000 square feet, the waiver would be 75% for ground floor uses, and 25% for second story uses.
- Allow property owners needing waivers to:
  1. Use reciprocal parking agreements with off-site property owners to share parking during specified time periods.
  2. Meet their off-street parking requirement through an agreement with neighboring parcels to use their excess parking.
  3. Pay an “in-lieu” parking fee to the City of Clayton that would be applied to the costs of public parking spaces.

These parking waivers are intended to “jump-start” commercial development in the Town Center area and would be directly applicable to the parking conditions for project. With the implementation of these policies, the potential downtown shortage will be mitigated, and the parking impacts will be less than significant. Parking demand would not be expected to overflow from the area and impact adjacent neighborhoods. The adoption of parking policies such as these will result in a beneficial impact to the downtown land use plan, and to the general economic conditions in Clayton.

### **Other Transportation Impacts**

There are some other categories of environmental impact resulting from the Project that have been addressed.

#### Delivery Vehicles

Deliveries to the businesses in the project would be made from vehicles that would be parked on the adjacent streets. These would occur mostly in the morning and are not considered to be a significant issue for a project of this size.

#### Pedestrian Access/Connectivity

The sidewalks and street frontage will be completed to their final conditions along the edges of this project. During the construction of the project, landscaping and aesthetic features will also be added along the frontage. Beyond this, there are no pedestrian connectivity issues involving sidewalks or pathways that need to be addressed by the project.

Bus Transit

This project will not have any effect on any bus transit features in downtown Clayton. The nearest bus stops will likely continue to be located on Clayton Road and Marsh Creek Road. As the Town Center Plan nears fulfillment, the relocation or change of some bus trips from Clayton Road to Center Street will be evaluated in coordination with the CCCTA.

Emergency Vehicle Access

Factors such as number of access points, roadway width, and proximity to fire stations determine whether a project has sufficient emergency access. In this case the proposed project would have access from two different roadways. Therefore, if one of the roadways is blocked or obstructed, an emergency vehicle would have an alternate route available to access the project.

## **Appendix F**

### **Responses to Public Comments on Rivulet Project IES/MND**

## VII. COMMENTS AND RESPONSES

### ***Introduction***

*The Initial Environmental Study/Negative Declaration (IES/MND) (dated March 2009) was released for public review on March 2, 2009. The review period for the IES/MND closed on April 2, 2009.*

*This section contains all public comments received during the public review period as well as one comment letter received after the close of the public review period. Following each public comment, responses have been provided by the City of Clayton. Under the California Environmental Quality Act (CEQA) and implementing Guidelines, the City of Clayton, as the “lead agency” is not required to respond to comments on a mitigated negative declaration. In order to ensure that public questions and concerns regarding environmental issues are addressed, responses are provided to all comments on environmental issues. Comments on various features of the project or the proposed conditions of approval, which may not be related to the project’s environmental impacts, are noted for decision-makers. Formal responses are not required nor provided for these issues.*

<b>Number</b>	<b>Commentator</b>	<b>Date</b>
	<b>Planning Commission Public Hearings</b>	
1	Minutes	May 10, 2009
	<b>Applicant, Residents, &amp; Agencies</b>	
2	Glen Miller	March 31, 2009
3	Department of Toxic Substances Control	March 31, 2009
4	Contra Costa Water District	March 31, 2009
5	Save Mount Diablo	April 2, 2009
6	State Clearinghouse	April 7, 2009
7	Contra Costa Water District	April 9, 2009

Excerpt  
Minutes  
City of Clayton Planning Commission Meeting  
Tuesday, March 10, 2009

Call to Order

Chair Catalano called the meeting to order at 7:00 p.m. at the Library Meeting Room, Clayton Community Library, 6125 Clayton Road, Clayton.

Present: Chair Tuija Catalano, Vice Chair Ed Hartley, Commissioner Bob Armstrong, Commissioner Keith Haydon, Commissioner Sandra Johnson

Absent: None

Staff: Community Development Director David Woltering  
City Attorney Dan Adams  
Planning Consultant Nick Pappani  
Assistant Planner Milan Sikela, Jr.

Public Hearings

- 4. **ENV 01-08, Development Plan, Komgold.** The proposed project site is located at 1005 and 1007 Oak Street (APNs 119-050-009 and 119-050-034) and includes a third parcel located west of Mitchell Creek (APN 119-050-008). The purpose of this item is to review and receive comments on the Rivulet Project Initial Environmental Study/Mitigated Negative Declaration (IES/MND), prepared in accordance with the California Environmental Quality Act. This report analyzes the potential impacts caused by the proposed project and identifies various measures to mitigate these impacts. The proposed Rivulet project involves the removal of two existing single-story modular buildings and the redevelopment of the site with a two-story, mixed-use building with approximately 7,000 square feet of retail space on the ground floor and seven (7) residential units on the second floor.

Director Woltering provided an introduction of the purpose of this agenda item as being to receive comments on the IES/MND environmental document and he described the process for adoption of the environmental document and the approval of the project. Planning Consultant Nick Pappani then provided an overview of the IES/MND, including the environmental findings of the document.

Commission comments and questions included:

- 1-1
- 1-2
- 1-3
- 1-4
- 1-5

- Will the addition of the third parcel satisfy landscaping and open space? Director Woltering indicated that staff believed it would.
- Will the residential units be sold or rented? Director Woltering said that the residential units could be either sold or rented.
- Who is responsible for preparing the Development Plan? Director Woltering answered that the applicant would be responsible.
- In reference to Mitigation Measure 1, the Commission asked who will monitor the air quality? Planning Consultant Pappani answered that the City Engineer would be monitoring the air quality.
- Does this air quality monitoring result in a weekly or bi-weekly report? Planning Consultant Pappani indicated that a weekly or bi-weekly report is not normally required, but can be conditioned. There is also a training program that is required.

- 1-6 • Regarding biology, it was suggested, in particular reference to Mitigation Measure 4, that a monitoring report requirement be added.
- 1-7 • Regarding cultural resources, what would happen if a resource is found? A training requirement should be added so that on-site construction personnel are familiar as to what to check for. This training could be part of a pre-construction meeting requirement.
- 1-8 • Regarding hydrology, the hydrology section should indicate the design objectives, including proposed plantings and erosion control measures, should be beneficial.
- 1-9 • If construction had been underway during rain, would there be measures to avoid negative downstream water quality impacts? Planning Consultant Pappani indicated that siltation fences and straw waddles would be installed. Laura Hoffmeister, Stormwater Manager for the City of Clayton, also addressed the Commission and indicated that after heavy rain events the City is required to inspect water quality devices to ensure that they are working properly.
- 1-10 • Will there be any impacts upon existing trail to Mount Diablo Elementary School, which is located adjacent to the project site? Planning Consultant Pappani indicated that there would be no impacts to the trail. We are trying to provide a seating area at the terminus of Center Street that is intended to block direct pedestrian/bicycle traffic across Mitchell Creek to and from the trail at that location.
- 1-11 • What is meant by general support from Department of Fish and Game (CDFG) representatives? Nick Pappani indicated that CDFG has indicated support for the proposed removal of invasive plants and the installation of native riparian vegetation to help protect Mitchell Creek and enhance the habitat there. Additionally, CDFG has indicated that the proposed project will not trigger the need for a Streambed Alteration Permit. Personal correspondence with a local Fish and Game representative is referenced in the Initial Environmental Study.
- 1-12 • Will property owner be responsible for C.3 Stormwater monitoring requirements? Planning Consultant Pappani indicated “yes” and referenced Mitigation Measure 12.
- 1-13 • Is it true that the number of species to be impacted is zero? Planning Consultant Pappani indicated, yes, since there is an existing physical impediment that prevents fish from coming upstream, and terrestrial vertebrates would not be impacted because of the mitigation measures required in the IES/MND .
- 1-14 • Does the third parcel west of Mitchell Creek include both the pedestrian bridge and vehicular bridge? Assistant to the City Manager Hoffmeister indicated that the pedestrian bridge is in the Mount Diablo School District and the vehicular bridge is part of an assessment district.
- 1-15 • Who is going to take care of the large leaning tree on-site? Planning Consultant Pappani indicated that risks for the tree will be transferred to the property owner.
- 1-16 • Will the stormwater requirements be the same as for Flora Square? Planning Consultant Pappani answered that the approaches between Flora Square and the Rivulet project are essentially the same. Ms. Hoffmeister confirmed that the Flora Square project includes the same stormwater concepts into its system; for example–infiltration planters.
- 1-17 • So flood gate requirements will apply? Planning Consultant Pappani answered “yes.”
- 1-18 • Restaurant uses should be factored into the traffic study. Planning Consultant Pappani indicated that, given all of the studies, intersections would operate at either level of service (LOS) A or B even under the cumulative scenario. Changing the trip generation rate for the project from a general retail category to a more specific category pertaining to restaurant uses would not result in any significant intersection impacts. Planning Consultant Pappani indicated that he can have the traffic consultant run some numbers if the Commission so desires.

- 1-19 • Are all biological resources part of the biological report? Planning Consultant Pappani answered "yes."
- 1-20 • Did the cumulative scenario traffic study take into consideration that the City of Clayton is encouraging restaurant usage in the downtown? Planning Consultant Pappani indicated that he would research further to respond to that question.
- 1-21 • Page 27 of the report should reference the Study that determined no presence of listed or threatened species on the site.
- 1-22 • What is the City's position on requiring a greenhouse gas emission impact analysis? Ms. Hoffmeister indicated that the City Council is keeping up-to-date with this ever-changing issue and its associated regulatory environment. Given the lack of identified quantitative thresholds, Ms. Hoffmeister indicated that the Council is waiting for specific State directives.

The public testimony period was opened.

Jerry Davis, 6000 High Street, indicated the following:

- 1-23 • Will people be able to cross the vehicular bridge to gain access to the open space area west of Mitchell Creek? Planning Consultant Pappani indicated that open space area is not intended as active open space, but as a passive open space area.
- 1-24 • What right of way will be abandoned? Planning Consultant Pappani indicated that the terminus of Center Street is the right of way that will be abandoned.

There being no further public comment, the public testimony period was closed. Commission comments and questions included:

- 1-25 • Have you heard of other items that will result in revisions? Planning Consultant Pappani answered "no."

**By Consensus, the Planning Commission asked if the comments received were sufficient for staff. Community Development Director Woltering indicated that, yes, the comments were sufficient and added that the comment period for the Rivulet IES/MND extends through until April 2, 2009.**

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Com Dev\ENV\2008\01-08.ies.mnd.comments

## **Comment 1, City of Clayton Planning Commission Meeting Minutes – March 10, 2009**

### Response 1-1: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether the addition of the third parcel would satisfy landscaping and open space requirements.*

The *Zoning Ordinance* Section 17.28.100 requires projects on parcels less than one acre in PD Districts with mixed uses to set aside 10 percent of the project site as open space. Clayton Municipal Code Section 17.28.100, subsection C.1, Off-Site Open Space and In-Lieu Contributions, states that mixed use projects on sites less than one (1) acre may meet all or a portion of the open space requirements through one or more of the following means:

1. The acquisition of land for public open space and/or the construction of open space improvements on public open space at off-site locations.
2. In-lieu financial contributions to the City for acquisition and/or maintenance of public open space. In-lieu financial contributions shall be based on the following criteria:
  - a. For the active portion (minimum fifty percent) of the open space requirement, a financial contribution for acquisition and/or maintenance of active recreation areas (e.g., athletic fields, playgrounds) in the City=s park system.
  - b. For the passive portion (maximum fifty percent) of the open space requirement, a financial contribution for maintenance of the City=s trail system.
3. If the financial contributions are based upon maintenance costs, such contributions shall be based upon reasonable maintenance costs for a ten-year period and shall be proportional to the land area that would be required if the open space area was provided on-site.

The original Creekside Terrace site area was less than one (1) acre; consequently, there is a nexus for determining that the proposed project needs to dedicate 10% of the site area as open space. The proposed project site is comprised of 37,639 sq ft and would be required to provide 3,764 sq ft of active open space. The proposed project includes the construction of 453 sq ft of outdoor private deck, 751 sq ft of outdoor common deck, and 335 sq ft of mini interpretive area. The total active open space provided would be 1,539 sq ft, which is 2,225 sq ft less than required. In addition, Mitigation Measure 16 of the IES/MND requires that a conservation easement be recorded across the open space parcel west of Mitchell Creek, which is now included in the overall project boundaries. The proposed conservation area measures approximately 13,000 sf. It is intended that the home owners association would be responsible for the care and maintenance of this area in perpetuity. The Zoning Code, as evidenced above, gives a certain amount of flexibility to the City in determining how each particular project can satisfy the City's PD open space requirements. It is the City's belief that the Creekside Terrace project as proposed, including mitigation requirements, satisfies the PD open space requirements.

### Response 1-2: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether the residential units will be sold or rented.*

This comment does not address the adequacy of the IES/MND and will be forwarded to the decision-makers for informational purposes.

Response 1-3: Commission Comments Regarding the Proposed Project

*The commenter inquired as to who is responsible for preparing the Development Plan.*

This comment does not address the adequacy of the IES/MND and will be forwarded to the decision-makers for informational purposes.

Response 1-4: Commission Comments Regarding the Proposed Project

*The commenter inquired as to who would monitor the air quality in reference to the requirements in Mitigation Measure 1.*

In response to the commenter's request, for clarification purposes Mitigation Measure 1 on pages 12 and 29 of the IES/MND is hereby revised as follows:

**Mitigation Measure 1.** The following measures shall be adhered to during all construction phases of the Project:

- Earthmoving or other dust-producing activities shall be suspended during periods of high winds, (i.e., instantaneous wind gusts of 25 mph or greater);
- All exposed or disturbed soil surfaces shall be watered at least twice daily on any day of high winds or when construction activities occur, including weekends and holidays;
- Stockpiles of debris, soil, sand or other materials that can be blown by the wind, shall be watered with a soil stabilizer or covered;
- Construction areas, adjacent streets, and routes for construction traffic shall be swept of all mud and debris by a water sweeper on a daily basis (minimum) on any day when construction activities occur, including weekends and holidays;
- All trucks hauling soil, sand, or other loose materials shall be covered or maintain at least two feet of freeboard;
- A compliance officer (City Engineer unless otherwise identified as part of the grading permit process), shall be responsible for implementation and monitoring ~~shall be identified as part of the grading permit process of the above requirements.~~

The above change does not affect the adequacy of the current environmental analysis in the IES/MND, but rather serves to clarify who the designated compliance officer will be for Mitigation Measure 1 of the IES/MND.

#### Response 1-5: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether the air quality monitoring will result in a weekly or bi-weekly report.*

A weekly or biweekly report is not normally required as part of this dust and erosion control measure, which is a standard particulate matter mitigation measure developed by the Bay Area Air Quality Management District. As compliance officer, the City Engineer would routinely monitor the construction site, and if any construction activities are determined to be in non-compliance with the requirements of Mitigation Measure 1 of the IES/MND, the City Engineer would ensure that the issue is rectified immediately thereafter.

#### Response 1-6: Commission Comments Regarding the Proposed Project

*The commenter suggested that, in reference to Mitigation Measure 4, a monitoring report requirement be added.*

In response to the commenter's request, Mitigation Measure 4(a) on pages 12 and 29 of the IES/MND is hereby revised as follows:

**Mitigation Measure 4.** A qualified biologist shall be retained to oversee construction and ensure that no inadvertent take of California red-legged frog, steelhead, or western pond turtle occurs as a result of short-term disturbance near Mitchell Creek. This shall include the following provisions:

- a) Prior to any grading or grubbing of the site, the qualified biologist shall conduct a preconstruction survey to confirm absence of any California red-legged frog, steelhead, or western pond turtle on the site, as called for in Mitigation Measure 3. A report summarizing the survey results shall be submitted to the Community Development Director.

The above change does not affect the adequacy of the current environmental analysis in the IES/MND, but simply ensures that the City of Clayton will receive the results of the preconstruction survey.

#### Response 1-7: Commission Comments Regarding the Proposed Project

*The commenter inquired as to what would happen if cultural resources are found on-site. The commenter recommends including a provision in the cultural resources mitigation that requires the training of construction workers.*

In response to the commenter's request, Mitigation Measure 6 on pages 13 and 35 of the IES/MND is hereby revised as follows:

**Mitigation Measure 6.** Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving

activities, an archaeological monitor shall be retained by the applicant and approved by the City to train the construction grading crew prior to commencement of earth-grading activity in regard to the types of artifacts, rock, bone, or shell that they are likely to find, and when work shall be stopped for further evaluation. One trained crew member shall be on-site during all earth moving activities, with the assigned responsibility of “monitor.” Should archeological, historical, or Native American artifacts or remains be discovered during construction of the Project, work in the vicinity of the find shall stop immediately until a qualified archeologist or paleontologist (approved by the Community Development Director), as appropriate, the resource(s) can be evaluated and the site and determine the significance of the find the appropriate means of curation is determined. Project personnel shall not collect or alter cultural resources. Identified cultural resources shall be recorded on forms DPR 422 (archeological sites) and/or DPR 523 (historic resources).

The above change does not affect the adequacy of the current environmental analysis in the IES/MND, but rather provides another mechanism to ensure that no cultural resources are adversely impacted.

#### Response 1-8: Commission Comments Regarding the Proposed Project

*The commenter suggested that it would be beneficial for the hydrology section of the IES/MND to indicate the design objectives, including proposed plantings and erosion control measures.*

Pages 43 and 44 of the IES/MND currently describe the C.3 requirements and how the proposed Stormwater Control Plan has been designed to satisfy the C.3 requirements. For further clarification purposes, additional text is hereby added from the Contra Costa County Stormwater C.3 Guidebook relating to the objectives that should be achieved in the design of stormwater systems:

As a result, a Stormwater Control Plan has been prepared for the project to address how the project would satisfy the C.3 requirements, which have the following design objectives:

- Design the site to minimize imperviousness, detain runoff, and infiltrate runoff where feasible
- Cover or control sources of stormwater pollutants
- Treat runoff prior to discharge from the site
- Ensure runoff does not exceed pre-project peaks and durations
- Maintain treatment and flow-control facilities

As indicated in the Plan, infiltration planters will be incorporated into the site design in order to meet C.3 requirements and minimize the quantity of pollutants that enter the storm drainage system. Although the existing soils do not meet the infiltration rate, material will be imported to be placed in the infiltration planters. A typical infiltration planter presented in the Contra Costa County Stormwater C.3 Guidebook removes pollutants through a combination of overland flow through vegetation, surface detention,

and filtration through the soil. For the project, a perforated underdrain pipe will be used under planters instead of infiltration of runoff into native soil because the underlying soil at the site has a slow infiltration rate of 0.06 to 0.20 inches per hour.

The above change does not affect the adequacy of the current IES/MND environmental analysis, but rather serves to describe in more detail the objectives that should be met when designing the project's stormwater system.

#### Response 1-9: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether there would be measures in place to prevent on-site erosion during storm events occurring throughout the construction phase of the project.*

The applicant is required to obtain a NPDES permit prior to initiating construction on the project site. As part of this process, Best Management Practices (BMPs) will need to be identified for the construction phase of the project. Standard BMPs include installation of devices (e.g., straw wattles) designed to prevent downstream sedimentation during storm events. In addition, after heavy rain events, the City is required to inspect water quality devices to ensure that they are working properly; this would include the devices utilized for the Creekside Terrace project site during construction.

#### Response 1-10: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether there would be any impacts to the existing trail to Mount Diablo Elementary School, which is located adjacent to the project site.*

The proposed project does not include any improvements to the existing pedestrian/bicycle trail owned by Mount Diablo Elementary School. Therefore, there would be no impacts to the trail.

#### Response 1-11: Commission Comments Regarding the Proposed Project

*The commenter asked for clarification regarding what is meant by "general support" from the California Department of Fish and Game (CDFG) representatives.*

As stated on page 30 of the IES/MND, informal consultation with the CDFG indicates that the creek corridor modifications proposed as part of the project would not require their authorization under the Streambed Alteration Agreement process (Kozicki, February 2009). This informal consultation was conducted by project biologist Jim Martin of Environmental Collaborative and CDFG representative Nicole Kozicki. Ms. Kozicki reviewed the entirety of the project's improvements and confirmed via e-mail that the proposed project would not require a Streambed Alteration Agreement. Further, the Creekside Terrace IES/MND was routed to CDFG via the State Clearinghouse, and no comments were received from the Department during the 30-day public review period.

#### Response 1-12: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether property owners will be responsible for C.3 stormwater monitoring requirements.*

As stated in Mitigation Measure 12, the property owner would be responsible for C.3 stormwater monitoring requirements. More specifically, MM 12 states in part:

*The project applicant shall commit the future property owners to fully fund the construction and perpetual maintenance of the storm drain system, including monitoring of the storm drain facilities. The funding mechanism shall be acceptable to the City and shall address costs for capital replacement, inflation, and administration. This shall include the preparation of an Operation and Maintenance Plan (OMP) consistent with the model proposed by the Contra Costa Clean Water Program. Any related review or administrative fees resulting from the OMP shall be the responsibility of the property owner. The OMP will “run with the land” and be enforceable on subsequent property owners of all residential and commercial lots...*

#### Response 1-13: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether or not it is true that the number of species to be impacted is zero.*

As stated on page 27 of the IES/MND, essential habitat for listed species known from the Mt. Diablo vicinity, such as Alameda whipsnake, California tiger salamander, western pond turtle, and California red-legged frog, is absent on the site. Similarly, no occurrences of special-status plant species have been reported from the site or immediate vicinity, and no populations are believed to occur on the site. Furthermore, in the unlikely and remote instance that listed species were present or were to disperse along the Mitchell Creek corridor onto the site, these species would not be impacted because of the mitigation measures required in the IES/MND.

#### Response 1-14: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether the third parcel west of Mitchell Creek includes both the pedestrian bridge and vehicular bridge.*

The pedestrian bridge located immediately north of the Creekside Terrace project site is owned by Mount Diablo Elementary School, and is therefore not included in the project parcel west of Mitchell Creek. The public vehicular bridge along High Street is part of an existing assessment district. The project applicant will be required to become part of the High Street permanent road division assessment district.

#### Response 1-15: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whom would take care of the large leaning tree on-site.*

Mitigation Measure 5(a) of the IES/MND places the responsibility of pruning tree #272 on the project applicant. As required in MM 5(a), all pruning shall be done under the supervision of a certified arborist.

Response 1-16: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether or not the stormwater requirements would be the same as Flora Square.*

The comment does not address the adequacy of the IES/MND; however, for informational purposes it is noted that the stormwater system approaches between Flora Square and the Creekside Terrace project are essentially the same.

Response 1-17: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether or not floodgate requirements will apply to the project.*

As stated in Mitigation Measure 14 of the IES/MND, the developer shall provide for flood proofing of those portions of the building below one-foot above the 100-year flood surface elevation. The method of flood proofing shall include operating procedures and be subject to the approval of the City's Floodplain Administrator.

Response 1-18: Commission Comments Regarding the Proposed Project

*The commenter stated that restaurant uses should be factored into the traffic study.*

The traffic consultant for the project has indicated that if the ground floor of the project was assumed to be "Quality Restaurant," then there would actually be a very slight reduction in AM peak hour trips and only 21 additional trips during the PM peak hour. In summary, using the "Quality Restaurant" category, which is assumed to not serve breakfast, would not be a significant change in trips. It is also important to note that even under the Cumulative (2030) plus Project scenario, all intersections are projected to operate at LOS B or better, as shown Table 7 of the IES/MND. A substantial amount of new vehicle trips would need to be introduced in order to degrade the study intersections to a level of service E, which is considered a significant impact per the City's LOS standard.

Response 1-19: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether or not all biological resources are part of the biological report.*

The comment does not address the adequacy of the IES/MND. Biological Resources having the potential to occur on-site are addressed in the Biological Resource Assessment prepared for the project site, included as Appendix A to the IES/MND.

Response 1-20: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether or not the cumulative traffic study took into consideration that the City of Clayton is encouraging restaurant usage in the downtown.*

Please see Response 1-18 above.

Response 1-21: Commission Comments Regarding the Proposed Project

*The commenter stated that page 27 of the biological report should reference the study that determined no presence of listed or threatened species on the project site.*

In response to the comment, page 27 of the IES/MND is hereby revised as follows:

Discussion

The following discussion is based upon the Biological Resource Assessment prepared for the project site by Environmental Collaborative (see Appendix A to this IES/MND).

Construction of the proposed project would require demolition of the existing buildings, removal of the ornamental landscape species, and grading on the developed portion of the site. In general, this is not expected to result in any adverse impacts on special-status species. Essential habitat for listed species known from the Mt. Diablo vicinity, such as Alameda whipsnake, California tiger salamander, western pond turtle, and California red-legged frog, is absent on the site. Similarly, no occurrences of special-status plant species have been reported from the site or immediate vicinity, and no populations are believed to occur on the site.

Response 1-22: Commission Comments Regarding the Proposed Project

*The commenter inquired as to what is the City's current position on requiring greenhouse gas emission impact analysis.*

In response to the comment, the below information has been hereby incorporated on page 25 of the IES/MND, under Question "c", for informational purposes, most specifically, in order to demonstrate how the Creekside Terrace project achieves many of the design objectives identified by various authorities to reduce GHG's.

**Production of greenhouse gases**

Background

There is evidence that the Earth's climate has been warming over the past century because of the buildup in the atmosphere of greenhouse gases (GHGs) emitted from human activity. Greenhouse gases have varying global warming potentials. The major components of greenhouse gases include carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O) and methane, (CH<sub>4</sub>). Ozone is a greenhouse gas; however, unlike the other greenhouse gases,

ozone in the troposphere is relatively short-lived and therefore is not global in nature. The burning of fossil fuels is the largest source of GHGs, particularly carbon dioxide. Greenhouse gases act much like a blanket, trapping the Earth's heat in the atmosphere and resulting in an increase in the global mean temperature. A warmer global climate could have significant effects on local and regional weather patterns, agricultural production, flooding and water resources, and the distribution of plant and animal species among other impacts.

In 2006, California enacted the California Global Warming Solutions Act (AB 32). The Act requires California to reduce its emission of GHGs to the statewide level emitted in 1990 by 2020. The Act charges the California Air Resources Board (CARB) with the task of developing, with public input, a plan for reducing GHG emissions and implementing that plan by January 2012.

As directed by SB97, the Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010. Amended CEQA Guidelines Section 15064.4, states that, in determining the significance of greenhouse gas emissions, a "lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- (2) Rely on a qualitative analysis or performance based standards."

As demonstrated below, calculating the approximate GHG emissions from automotive vehicles that would result from buildout of the proposed project is possible; however, it should be noted that the emissions calculations have significant limitations. These calculations allow the user to estimate GHG emissions in pounds per day or tons of CO2 per year for various land uses and projects. However, the GHG emissions calculations presented here only evaluate and model aggregate CO2 emissions – they do not demonstrate, with respect to a global impact, how much of these aggregate emissions are in fact "new" emissions specifically attributable to the development resulting from approval of the proposed project.

The proposed project for the most part would not "create" GHG emissions. Instead, by adding businesses and residents to the area, the project would create conditions under which emissions would "move" from one area to another, as an existing driver moves from one area to the other. This fact is critically important, because the approval of the proposed project would not directly result in the creation of new drivers – the primary source of the proposed project's emissions. Thus, the use of models that measure overall emissions, without accounting for existing emissions, overstates the proposed project's impact related to GHG emissions. Overstating the impacts of the proposed project on GHG emissions could lead to misallocation of resources in seeking solutions to GHG

emissions and climate change problems. For example, a more effective approach to reducing GHG emissions to assist with resolving climate change issues could include State or federal regulations on fuel formulation, as California is attempting to do with the Low Carbon Fuel Standard.

Analysis

BAAQMD has jurisdiction over much of the nine-county Bay Area. The current BAAQMD CEQA Guidelines do not provide any significance thresholds for GHG emissions. In December 2009, the BAAQMD circulated an updated draft guidance document which is to be considered for adoption in April 2010. Proposed new significance thresholds include quantitative threshold of significance for GHG emissions. The proposed updated guidance provides that a development project, other than a stationary source, would have a significant cumulative impact unless:

- The project can be shown to be in compliance with a qualified Climate Action Plan;
- Project emissions of CO<sub>2</sub> equivalent GHGs (CO<sub>2</sub>e) are less than 1,100 metric tons per year; or
- Project emissions of CO<sub>2</sub> equivalent GHGs are less than 4.6 metric tons per year per service population (residents plus employees).

However, the Draft BAAQMD CEQA Guidelines contain screening thresholds for GHG emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration. In addition, the screening criteria in this section do not account for project design features, attributes, or local development requirements that could also result in lower emissions. For projects that are mixed-use, infill, and/or proximate to transit service and local services, emissions would be less than the greenfield type project that these screening criteria are based on.

The screening criteria developed for greenhouse gases were derived using the default emission assumptions in URBEMIS and using off-model GHG estimates for indirect emissions from electrical generation and water conveyance. Projects below the applicable screening criteria shown in Table 3-1 of the Guidelines would not exceed the 1,100 MT of CO<sub>2</sub>e/yr GHG threshold of significance for projects other than stationary sources. The relevant screening criteria from Table 3-1 are as follows:

	<u>Operational Criteria Pollutant Screening Size</u>	<u>Operational GHG Screening Size</u>
<u>Condo/townhouse, general</u>	<u>451 du (ROG)</u>	<u>78 du</u>
<u>Quality Restaurant</u>	<u>47 ksf (NOX)</u>	<u>9 ksf</u>

Given that the Creekside Terrace project would consist of seven (7) dwelling units and approximately 7,200 sf of ground-floor retail uses, the project would not exceed the District's **draft** GHG emissions threshold.

Furthermore, as shown in Table 4, potential greenhouse gas emissions for both construction and operation of the proposed project have been calculated.

<b><u>Table 4</u></b> <b><u>Short-Term Construction and Operational Greenhouse Gas Emissions for Proposed Project</u></b>	
<b>Source</b>	<b><u>Maximum CO<sub>2</sub> Equivalent (Tons/Year)</u></b>
Construction Equipment Exhaust	<u>98.80</u>
Operational (Motor Vehicles)	<u>927.41</u>
<b><u>Notes:</u></b> <u>Equipment Exhaust: Emissions were calculated using the URBEMIS2007 (Version 9.2.4) computer program.</u> <u>Construction Waste: Emissions were calculated based on data obtained from the USEPA for construction generated debris and waste (USEPA 1998).</u>	

The above numbers are considered to be very conservative as they do not take into account the greenhouse gas emissions of the existing structures that will be removed. In addition to the difficulty in following the CEQA requirements described above, to accurately account for greenhouse gas emissions attributable to the project, it would be necessary to differentiate between new sources that otherwise would not exist but for the project, and existing sources that have simply relocated to the project area (presumably from anyplace in the world).

Greenhouse Gas Emission Strategies of the Creekside Terrace Project

In March 2008, the California Attorney General issued a paper for use by local agencies in carrying out their duties under CEQA as they relate to global warming. Included were examples of various measures that may reduce the emissions of individual projects that result in global warming. As noted in the paper, each of the measures should not be considered in isolation, but as part of a larger set of measures, that together, would help reduce greenhouse gas emissions and the effects of global warming. In June 2008, the Governor's Office of Planning and Research released a technical advisory on addressing climate change in CEQA documents. The advisory included examples of greenhouse gas reduction measures, but did not require the implementation of any particular measure. The measures included in the technical advisory are substantially similar to the measures proposed by the Attorney General.

Table 5 lists the measures from the California Attorney General's office that are applicable to the proposed Creekside Terrace project and indicates the whether, and how, the project would conform to the measures.

**Table 5  
Greenhouse Gas Emissions Measures – Creekside Terrace Project**

<b>Office of the California Attorney General Methods to Offset or Reduce Global Warming Impacts</b>	<b>Creekside Terrace Compliance</b>
<b><u>Energy Efficiency</u></b>	
<u>Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.</u>	<u>The project will be designed for energy efficiency.</u>
<u>Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.</u>	<u>The project will include the installation of efficient lighting and lighting control systems.</u>
<u>Install light colored “cool” roofs, cool pavements, and strategically placed shade trees.</u>	<u>Strategically placed shade trees will be utilized. Cool pavements and cool roofs will be included pending appropriateness of design and feasibility.</u>
<u>Install energy efficient heating and cooling systems, appliances and equipment, and control systems.</u>	<u>The project will include the installation of energy-efficient heating and cooling systems, appliances, equipment, and control systems to the maximum extent feasible.</u>
<u>Limit the hours of operation of outdoor lighting.</u>	<u>Sufficient lighting for safety purposes will be required consistent with tenant hours. However, phased or zoned lighting reductions will be utilized in areas with reduced tenant hours.</u>
<b><u>Renewable Energy</u></b>	
<u>Install solar and wind power systems, solar and tankless hot water heaters, and energy-efficient heating ventilation and air conditioning. Educate consumers about existing incentives.</u>	<u>Energy-efficient heating and ventilation will be utilized. Solar power systems will be considered. Solar and tankless water heaters will be considered and utilized where feasible.</u>
<b><u>Water Conservation and Efficiency</u></b>	
<u>Create water-efficient landscapes.</u>	<u>Water-efficient landscaping design and material will be utilized.</u>
<u>Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.</u>	<u>Water-efficient irrigation systems and devices will be utilized.</u>
<u>Design buildings to be water-efficient. Install water-efficient fixtures and appliances.</u>	<u>Water-efficient fixtures and appliances will be utilized.</u>
<u>Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.</u>	<u>Watering methods will be utilized that control runoff and restrict water to non-vegetated surfaces.</u>
<u>Restrict the use of water for cleaning outdoor surfaces and vehicles.</u>	<u>Restriction on the use of water for cleaning outdoor surfaces and vehicles will be implemented, through CC&amp;Rs, consistent with any specific policies set forth by CCWD.</u>
<b><u>Solid Waste Measures</u></b>	
<u>Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).</u>	<u>Reuse and recycling of construction waste will be implemented to the maximum extent feasible.</u>
<u>Provide interior and exterior storage areas for</u>	<u>Separate waste and recycling receptacles will be utilized</u>

<u>recyclables and green waste and adequate recycling containers located in public areas.</u>	<u>on-site. Interior and exterior storage areas for recyclables will be located within the project site.</u>
<b><u>Land Use Measures</u></b>	
<u>Include mixed-use, infill, and higher density in development projects to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods.</u>	<u>The proposed project is an infill development. In addition, the project would develop the site at a higher density than the existing conditions. The project would living and entertainment options to local residents and workers, which could result in a reduction of vehicle trips.</u>
<u>Incorporate public transit into project design.</u>	<u>The project is located in an area served by public transit.</u>
<u>Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.</u>	<u>The project includes the parcel west of Mitchell Creek, which is currently in an open space condition. As part of the project, a conservation easement will be recorded across this parcel so that it will be maintained in an open space condition in perpetuity.</u>
<u>Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.</u>	<u>Pedestrian paths/facilities are located adjacent to project on existing street network.</u>
<b><u>Transportation and Motor Vehicles</u></b>	
<u>Limit idling time for commercial vehicles, including delivery and construction vehicles.</u>	<u>State law regulates idling of commercial vehicles and prohibits idling for longer than five consecutive minutes or five total minutes in one hour.</u>
<u>Use low or zero-emission vehicles, including construction vehicles.</u>	<u>Low or zero-emission vehicles will be utilized to the maximum extent feasible.</u>
<u>Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).</u>	<u>The project applicant will work with the City to determine the appropriate number and location of electric vehicle charging facilities.</u>
<u>Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.</u>	<u>The project is a relatively small development that would not incorporate improvements that would alter the existing street system.</u>
<u>Incorporate bicycle-friendly intersections into street design.</u>	<u>The project entrance would have clear lines of sight for both bicyclists and motorists.</u>
<u>For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, e.g., locked bicycle storage or covered or indoor bicycle parking.</u>	<u>The project will provide adequate bicycle rack parking near building entrances.</u>

The proposed Creekside Terrace project is surrounded by existing development, and is considered to be an infill project. As identified above in Table 5, infill development is one of the greenhouse gas reduction strategies advocated by the Attorney General. Infill developments can reduce commutes, provide amenities closer to existing residences, and can reduce development pressure on undeveloped lands at the periphery of cities. Therefore, the proposed Creekside Terrace project is appropriately located and designed to minimize the emissions of greenhouse gases and thereby reduce the project's contribution to global climate change.

The additional climate change information added to the Creekside Terrace IES/MND does not result in any new significant impacts associated with the proposed project. The above information has been hereby incorporated into the IES/MND for informational purposes, most specifically, in order to demonstrate how the Creekside Terrace project achieves many of the design objectives identified by various authorities to reduce GHG's. As a result, the above information does not result in the need to recirculate the Creekside Terrace IES/MND.

It should be noted that because two tables (Tables 4 and 5) have been added to the IES/MND, all subsequent tables in the Creekside Terrace IES/MND are hereby renumbered accordingly.

#### Response 1-23: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether or not people will be able to cross the vehicular bridge to gain access to the open space area west of Mitchell Creek.*

The comment does not address the adequacy of the IES/MND, but it is noted that the open space parcel west of Mitchell Creek is not intended as an active open space area, but rather as a passive open space area. The only activities anticipated to occur on the western parcel over time are related to periodic maintenance of the parcel.

#### Response 1-24: Commission Comments Regarding the Proposed Project

*The commenter inquired as to what right-of-way would be abandoned.*

The comment does not address the adequacy of the IES/MND, but it is noted that the terminus of Center Street is the right of way that would be abandoned as part of the project.

#### Response 1-25: Commission Comments Regarding the Proposed Project

*The commenter inquired as to whether Planning Consultant Pappani had heard of other items that would result in revisions.*

The comment does not address the adequacy of the IES/MND and is too general to enable a specific response.

## Letter 2

May 31, 2009  
City of Clayton Planning Commission & David Woltering, AICP – Community Development Director  
6000 Heritage Trail  
Clayton, Ca. 94517

**RECEIVED**

MAR 31 2009

RE: Rivulet Mixed-Use Development Project  
Rivulet Initial Environmental Study / Mitigated Negative Declaration  
Public Questions, Comments and Observations

CLAYTON COMMUNITY  
DEVELOPMENT DEPT.

In response to your Notice of Intent to adopt a mitigated Negative Declaration and with reference to previous concerns expressed January 30, 2008 (copy attached); the following issues and considerations are expressed for your review and discussion:

- 2-1 Land Use  
With the exception of the specific mention of a “western-style frontage characteristic” as suggested in the TCSP, an acknowledgement of the active open space elements of the zoning ordinances in an unrelated discussion and a notation of “general” conformance to the Municipal Code Tree Ordinance components in the section discussing the replacement trees, there is not a definitive discussion or assertion as to the project’s compliance or deviance to the many other related elements of the Clayton Land Use’ criteria. Has the project been examined and certified to be in strict compliance to all other related components of the General Plan, zoning and TCSP guidelines to the extent that as proposed the project and each of its elements and components comply without the need for exceptions, modifications, waivers, or amendments that must be granted for the project’s ultimate approval? Has this part of discussions been waived, tabled for future review or found not applicable to the negative declaration process?
- 2-2  
With regard to the active open space component of the Planned Development regulations, this project (similar to the recently approved residential project in the Downtown) relies on a small private, isolated and mostly passive approach to meeting this requirement. Had the project been entirely commercial office/retail, this approach would essentially be moot since the PD regulations would arguably not apply. However, this element would have at the least addressed the opens space to land ratio guidelines of the TCSP and other related zoning and municipal code ordinances.
- 2-3  
With the residential component comes a further burden without apparent compensation on the Publics’ past capital investments in active park, sports, recreational activities and amenities. While it is not indicated specifically, current assessments such as the Park and LMT should they apply, cover only maintenance and upkeep of these Public amenities. As the site has been deemed physically impossible to provide such amenities in compliance with the PD regulations shouldn’t the project either be assessed a fee to waive this element or otherwise required to compensate the City for its investments?
- 2-4  
Other related land use, management and enforcement protocol items: In considering the residential unit sales will a City enforceable HOA and related covenants be required to insure proper behavioral policies (i.e. noise, outside storage, and/or potential unsafe behavioral restrictions (due to school proximity)), or to insure proper upkeep, exterior modifications etc. ? Are an encroachment permit required and/or indemnification and maintenance agreement with the School District required for school property creek side modifications?
- 2-5 Public Safety  
The Report concludes the safety hazards posed by building and parallel parked vehicles as “less than significant” but notes a separate analysis of crossing safety improvement options “will” be prepared. Shouldn’t the conclusion then be a negative impact pending mitigation measures mandated from the

2-5 Continued	report such as flashing children cross walk signage, crosswalk flashing lights or other similar devices required to mitigate safety issues presented by the proximity to Mt. Diablo Elementary School?
2-6	Further, the Report appears not to address that the project will invariably use up or limit the current availability of parking for drop off activity associated with the proximity to the school access point (presumably, these spaces will be occupied by tenants and/or patrons of the project). This will require that drop off parking and child crossing will be farther away which could pose a potential safety impact and the need for police or additional crossing guard presence. Shouldn't this be further evaluated and an assessment made to cover the impact of these potentials costs?
2-7	<u>Parking</u> The parking analysis concludes that as proposed, the project will not within itself meet parking demand standards even with a waiver. Will the project be assessed a fee for the apparent relied upon use of the City provided offsite spaces including the on-going maintenance of this infrastructure?
2-8	Specifically, with respect to parking infrastructure provided both on and offsite, will this development be required to participate in a reciprocal parking arrangement and limit restricted parking to compensate for the use of public facilities? Will they be assessed an improvement fee for street frontage and offsite parking improvements?
2-9	<u>Parking concept (lift)</u> While this lift is novel, how is this behavior (use of this lift) enforceable? How will noise, energy demand, and potential for spill from operational requirements (hydraulic fluids) be addressed? Are additional parking restrictions, ordinances, and enforcement costs etc. going to be needed?
2-10	<u>Storm water/waste water/storm drainage hazards</u> The study appears to provide little in depth examination of potential need to treat storm water runoff and/or sewage (see comment above) and potential harmful environmental exposures. The project contains what is essentially a public garage, decks and possible restaurant use, all which present potential hazards especially in proximity to the creek. Shouldn't this be further discussed and required to be addressed?
2-11	<u>California Department of Fish and Game</u> Project discussion indicates an "informal" discussion with CDFG and a formal designation has been stipulated as less than significant. Is this in lieu of a formal CDFG review and permit?
2-12	<u>Stream/Tree modifications</u> Since only conceptual plan and elevations have been proposed, will there be further City and regulatory review during detail design and monitoring during construction as to whether or not underground structures, pits, trenches, foundations, etc. will have a significant impact on both stream modifications including riparian installation and existing tree root structures? Will there be conditions placed on the development to halt or cease development until such impacts are addressed at no cost to the City or harm to the environment?
2-13	Are there conditions, penalties, mitigations, etc. sufficient to address and protect replacement of trees that are designated to be retained but do not survive? For example, what if "significant" oak does not survive pruning?
2-14	Note also that the arborist report does not provide a calculation as to the requirements of size and amount of replacement trees. Has the developer provided the CDD and PC with a calculation that actually quantifies the "general conformance" (Page 31 and BRA Section page 10) to the tree

2-14  
Continued

ordinance? How strict is this interpretation? Has the project just been required to meet, exceed or just generally conform to the ordinance's requirements to replace trees removed and or damaged as a result of the development? Because of the significance of the trees and their heritage in respect to their importance to Clayton (as enumerated in current ordinances) this protection and replacement requirements should be in addition to any plantings including street trees that are proposed to satisfy the normal guidelines and requirements of the TCSP and applicable zoning requirements.

2-15

Flooding, Creek flows and protection of off-site and creek side infrastructure.

The concern found here is the upstream and downstream impact of the "flood gates" (discussion page 40). This mitigation appears to have impacts (potential flooding or increased downstream flow issues beyond the immediate site area). How does the City propose to have the developer insure and protect the City's residents, school property and City's infrastructure (i.e. the bridge or culvert under Clayton Rd. etc) in the event of such a flooding occurrence?

2-16

With respect to this development's impact on the groundwater recharge and storm runoff (discussion pages 45/46), does this project's review consider the impacts of flows and discharges from the recently approved residential, parking lot, commercial development (all which have created impervious surfaces of their own) and how does the introduction of more directed flows from this project impact the current storm drain system at either upstream (i.e. potential back up) or downstream (capacity and/or failure issues) discharge points? (Note exhibits seem to indicate analysis does not.) Does this project limit or negatively impact these new projects or future development in this discharge basin as it relates to current infrastructure?

2-17

Americans with Disabilities Act

There is no clear explanation in regard to the project complying with ADA access requirements or providing ADA accessibility to all second story residential units. How is this accomplished? Is this through common area? Where is assumed ADA parking on and off-site?

2-18

Public Facilities and Services

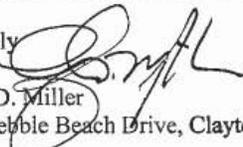
With regard to the discussion of impacts on public facilities or services; besides the construction of the street improvements on both High and Oak Street, will the development be required to pay a portion of the required annual maintenance of these improvements or is this cost absorbed by the City?

2-19

Since parking and public safety (as it relates to school and drop off crossing) and school access are in such close proximity, is an active interpretative center (presumably for public use) a concept that has potential for future public safety, liability and/or vandalism issues? Will this require an increased school or police service presence or patrol, maintenance or insurance costs? If so, shouldn't this project be assessed and be required to pay fees beyond the 5 year mitigation as noted on page 15 or will these future potential added costs associated with this project be absorbed in future assessments to the General Public?

Thank you for taking the time to review and discuss these concerns. I recognize that some of these matters may eventually be addressed not as part of this Environmental process but in Staff's review and modifications to the project plans, Planning Commission's, and/or Council's Project Conditions, Development Agreement Covenants or to satisfy Code Compliance's to the applicable authorities. As such, I would appreciate and welcome notification or further explanation of the eventual mitigations or deferrals of these items.

Sincerely

  
Glenn D. Miller  
1005 Pebble Beach Drive, Clayton Ca.

January 30, 2008  
Faxed to City Hall

Honorable Mayor Gregg Manning and Planning Commission Chairman Keith Haydon:

Due to illness, I was unable to attend the Joint Study Session contemplating the mixed-use development along the creek. Recognizing that due to the special circumstances and timetable that the City faces with this project it is important that the process of review and vetting of the issues that are part of this site is both thorough, thoughtful and complete; it is equally important that all possible concerns and mitigating factors that may need to be examined which might affect an expedited review and approval be brought to your attention as soon as possible.

In looking at the packet I had intended to speak on the following issues that need to be examined to insure that these items were addressed and offer some suggestions as to how they may be mitigated. Without a bias either in favor or against the use of this property in the manner contemplated I would like the City Council and Planning Commission to please take the time to consider the following environmental, life-safety, quality of life and cost of futures services issues when reviewing this project:

**Adherence to the Town Center Specific Plan and Municipal Code Standards:** As proposed the site is planned to be developed in a manner inconsistent with the current Town Center Specific Plan and Municipal Code Standards and Guidelines as they relate to parcel area devoted to on-site parking, and landscaping. Recognizing the unique configuration of the site, it's proximity to the creek and the practicality of meetings these requirements on-site; and, in consideration of the City waiving these standards the Commission should Condition the project such that the Developer is required to provide off-site landscaping and parking improvements (including a fee for future maintenance) at a minimum equal to that which would have been required by the standards.

**Adherence to the Tree Preservation Ordinance:** The site has a number of mature trees that should be preserved. These provide shade for the creek habitat and the roots help stabilize the creek bank. Allowing the site to be developed as planned will negatively impact these trees, the habitat they provide and quality of life contributions. Again, recognizing the unique configuration of the site, the desire to maximize land use for revenues and the practicality of protecting these trees the Commission should condition the project such that new trees are planted (again with a fee collected for future maintenance) throughout the Town Center in the number, size, and species as prescribed by the Municipal Code Ordinance. The Condition should be specific that these trees are to mitigate a specific negative environmental impact treated separately and thus provided in addition to those that would normally be required per the Town Center Specific Plan Standards.

**Unique Environmental Issues Presented by the Proximity to the Creek:** Because of the proximity to the creek any development that is contemplated is certain to affect the flow of the creek through this unique setting. Before approving this project the Commission needs to make sure that the placement of any and all structures inclusive of substructures such as pilings, footings, retaining walls, drainage pipes etc. does not negatively affect the channel flow of the creek both up-stream and downstream from the project. In addition mitigations and Conditional requirements to provide for preservation and restoration of the creek on the opposing bank should be included in the projects' scope.

**Traffic and Pedestrian Safety:** Many on the Commission may be aware that the site contains and is adjacent to an “unofficial” gathering, parking, drop off and collection of about 30- 40% of the school children that attend Mt. Diablo Elementary (I’m just guessing at the number - but it is quite a lot). As this project is developed the crosswalk safety, visibility and parking issues that currently exist will be negatively exacerbated. The commission needs to examine this issue and Condition the project to provide additional safety devices such as signage, lighting and in-ground crosswalk signalization. The parking regulations for the street frontages that surround this area needs to also be examined and future signage and enforcement costs should be considered when project fees are determined and assessed.

**Parking:** The contemplated proposal for including residential units seems to be contradictory to the principles of street parking spaces and municipal lots shared by various retail and commercial uses in the downtown. This concept which reduces the amount of land devoted to onsite parking in exchange for increased land use for commercial and retail ventures relies on the shared and/or occasional limited use of parking spaces. With the perceived benefit to the Citizens that there are increased revenues that outweigh the costs of providing street parking spaces or parking lots this seems to be an equitable and beneficial policy. This is different than the overnight and day long use of spaces that residential use requires.

If residential use is to be considered, our parking regulations need to be reviewed and this use addressed. Such real use needs as weekend, overnight, recreational and second car or occasional use car and truck and delivery vehicle parking need to be addressed). Once assessed, the costs of any additional spaces that need to be provided inclusive of additional off-site spaces that will be used by the residential users should be calculated along with any foreseeable regulatory and enforcement expenses. In this instance expediency may dictate that the normal Ordinance process may dictate Council cannot rely on a normal Ordinance based fee assessment process. However, these costs and expenses to the City of Clayton and future downtown retail and commercial uses are real and should be borne by this developer either in form of assessed development fees or annual use fees that are Conditions to the Approval of the project.

Thank you for taking the time to read this and I look forward to the future discussions to see how these issues are addressed and these concerns mitigated.

Sincerely

Glenn D. Miller

CC: Via Email

Mayor Gregg Manning  
Planning Commission Chair - Keith Haydon  
City Manager – Gary Napper  
Development Director – Jeremy Graves

**Comment 2, Comment Letter from Mr. Glen Miller – March 31, 2009**

Response 2-1: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to whether or not the land use elements of the project are in strict compliance with all components of the General Plan, zoning and TCSP guidelines.*

The proposed project is consistent with the Clayton General Plan, Town Center Specific Plan, and Zoning Ordinance, as discussed in Section 9 of the IES/MND.

Response 2-2: Glen Miller Comments Regarding the Proposed Project

*The commenter recommended the open space to land ratio guidelines of the TCSP and other related zoning and municipal code ordinances be addressed.*

Please see Response 1-1.

Response 2-3: Glen Miller Comments Regarding the Proposed Project

*The commenter recommended that since the site has been deemed physically impossible to provide amenities in compliance with the PD regulations, the project shall be assessed a fee to waive this element, or otherwise be required to compensate the City for their investments.*

Please see Response 1-1. In addition, the project applicant will be required to pay Quimby fees per the requirements of City Code.

Response 2-4: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to whether there would be City enforceable HOA and related covenants to insure proper behavioral policies, upkeep, and/or exterior modifications. Furthermore, the commenter inquired as to whether an encroachment permit and/or an indemnification and maintenance agreements are required with the School District for school property creek side modifications.*

The comment does not address the adequacy of the IES/MND, but it is expected that the project will involve a home owners association and School District properties are not anticipated to be directly involved with this project.

Response 2-5: Glen Miller Comments Regarding the Proposed Project

*The commenter questioned the conclusions of the traffic study regarding safety hazards posed by the building and parallel parked vehicles. The commenter appears to suggest that the conclusion should be “a negative impact.”*

The commenter refers to parallel parking, which would remain along the frontage on Oak Street. However, the commenter appears to be referring to the existing parking north of the building, which is not parallel, but rather angled parking.

The utilization of parking spaces just north of the project site by parents to drop-off and pick up their kids from Mount Diablo Elementary School is a pre-existing condition that is not a result of the proposed Creekside Terrace project. The CEQA Checklist question that relates most to this pre-existing condition is “Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).” As stated on page 66 of the IES/MND:

In addition, although the project would increase activity in the existing school drop-off/pick-up area north of the project, the project itself would not result in any significant impacts on pedestrian safety at the crossing (it should be noted that a separate analysis of the school crossing on Oak Street will be prepared for the City to lay out the safety improvement options that have been discussed and analyzed for this location).

#### Response 2-6: Glen Miller Comments Regarding the Proposed Project

*The commenter noted that the Traffic and Circulation report does not appear to address the issue of the limited availability of parking for drop off activity associated with the school.*

The parking spaces located north of the project site are not officially designated as a school drop-off/pick-up location; therefore, these spaces are available to any member of the public. However, the City is sensitive to the fact that these parking spaces provide a convenient location for parents to drop-off and pick-up their children, and that these spaces have been used as such for quite some time. As a result, City staff is considering a condition of approval for the Creekside Terrace project that would limit the amount of time each car can park in the public parking spaces that are currently being utilized as a drop-off/pick-up location. This would ensure a higher “turnover” rate of these spaces, resulting in a greater overall availability to parents.

#### Response 2-7: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to whether the project will be assessed a fee for the apparent relied upon use of the City provided offsite spaces.*

Since the release of the original Rivulet Project IES/MND, the parking discussion under Question (e) of the Transportation and Circulation section of the IES/MND, has been revised to reflect the small increase in ground floor retail square footage, make minor corrections to the parking discussion, and clarify that the applicant, in compliance with Municipal Code Section 17.37.070, would pay in-lieu parking fees, which would ensure that adequate funds are being collected to provide sufficient long-term parking for development in the Town Center area. Therefore, the project would have a less-than-significant impact on parking, as originally determined in the IES/MND.

Discussion

The City of Clayton Zoning Code requires two off-street parking spaces for each residential unit and one space for each 400 square feet of retail space (without a Town Center Parking waiver) as specified in the Town Center Parking Study. **Table 79** shows the required parking for the project according to City standards and **Table 810** shows the off-street parking proposed as part of the project. As shown **Table 79**, the project would require 14 off-street spaces for the upper level residential units and approximately 1828 parking spaces for the proposed ground floor retail space. It should be noted that a 75 percent waiver of the City parking standards for the ground floor space is permitted as part of the City’s plan to encourage retail uses in the Town Center area.

<b>Table 79</b>			
<b>Town Center Parking Requirements for the Project</b>			
<b>Development</b>	<b>Size</b>	<b>Trip Rate</b>	<b>Parking Spaces</b>
General Retail (1 <sup>st</sup> Floor)	7,000 <del>000</del> <u>200</u> sq ft	<del>2.5 per ksf</del> <u>1 space for every 250 sf</u>	<u>Approximately 1828</u>
Town Center Parking Waiver (75% reduction)			-14 <del>21</del> <u>21</u>
Residential	7 units	2 per unit*	14
<b>Total</b>			<b>1821 (with waiver)</b> <b>342 (without waiver)</b>

\* Note: This includes 1.5 spaces per unit plus 0.5 guest spaces per unit.

<b>Table 810</b>	
<b>Proposed Off-Street Parking for the Rivulet Creekside Terrace Project</b>	
<b>Project Component</b>	<b>Parking Spaces</b>
General Retail (1 <sup>st</sup> Floor)	0
Residential (Parking Garages for Residents)	14
Residential (Guest Parking Spaces)	7
<b>Total</b>	<b>21</b>

For comparison, a conservative estimate of the parking demand for the project using data from the ITE Parking Generation Manual was made. As mentioned previously, the project includes 7,000~~000~~200 square feet of retail space along with seven residential units. The parking demand estimates in **Table 810** are based on the “General Retail/Shopping Center Land Use” (Category 820) for the first floor, and the residential rate for the seven dwelling units. The calculation is shown in **Table 911**. These parking calculations result in a parking demand for 367 spaces.

<b>Table 911</b>			
<b>Maximum Parking Demand for the Project</b>			
<b>Development</b>	<b>Size</b>	<b>Rate per 1,000 sq ft</b>	<b>Parking Spaces</b>
General Retail (1 <sup>st</sup> Floor)	7,000 <del>000</del> <u>200</u> sq ft	3.23	<u>223</u>
Residential	7 units	2 per unit	14
<b>Total</b>			<b>367</b>

Due to the location of the project within the Town Center area and effects of shared parking, the parking demand for the project is anticipated to be less than the maximum. For another comparison, the parking from a small mixed-use project of similar size could use a typical

parking generation rate of 2.8 spaces per 1,000 sq ft for retail. The City of Walnut Creek requires 3.3 spaces per 1,000 sq ft for all uses in the downtown area. For residential uses about 1.3 spaces per unit is what is normally required for downtown developments. If the calculation assumes a more urban/downtown setting then the estimated demand would be about 29 parking spaces for the project.

~~The 21 off-street parking spaces being provided for the project's residential units are anticipated to meet the City's parking requirements. However, u~~Using the ITE Parking Generation Manual rates, the project's parking space total is anticipated to fall short of the demand by 156 spaces. Based upon the most comparable Walnut Creek parking generation rates, the proposed project would result in an eight parking space deficit. While the Municipal Code does allow commingling of commercial and residential parking spaces (see Section 17.37.060, Reciprocal Parking Facilities), it is impractical to assume that the seven parking spaces on the proposed driveway pads for the project's residential units could be used to support the commercial use. Consequently, the project would be subject to payment of in-lieu parking fees (see Section 17.37.070, In-Lieu Parking Fees). However, it should be noted that Additional parking demand could be readily accommodated by the is available on-street and public parking in the Town Center area without increasing parking occupancy rates more than three percent (based on the existing supply). At build out the Town Center area is anticipated to have up to 1,100 on-street and public parking spaces available. Although the use of on-street parking would increase on the blocks closest to the project, the vehicles from the proposed project would increase the overall downtown parking occupancy levels by less than 2 percent.

#### On-street parking conditions

The City of Clayton currently has about 218 on-street parking spaces in the downtown area. About 110 of these spaces are located within two blocks of the site. The occupancy of the downtown spaces is approximately 65 percent during active times and 80 percent during the busiest weekend evenings. The *Town Center Parking Study* (SAS Planning and Consulting, May 2006) contains a complete inventory.

#### Conclusion

The proposed project would generate a demand for 367 parking spaces and provide 21 parking spaces. ~~Additional off-site parking spaces in the surrounding downtown area are anticipated to satisfy the remaining demand. Sufficient on-site and on-street parking could meet the proposed project parking demands.—~~ However, the project is required, per Municipal Code Section 17.37.070, to pay in-lieu parking fees, which would ensure that adequate funds are being collected to provide sufficient long-term parking for development in the Town Center area. Therefore, as the proposed project, the project would have a *less-than-significant* impact ~~would result on parking.~~

#### Response 2-8: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to whether the development will be required to participate in reciprocal parking arrangement and limit restricted parking to compensate for the use of public facilities, and would there be an assessed improvement fee for the street frontage and offsite parking improvements.*

Please see Response 2-7 regarding parking. Questions related to the types of infrastructure fees the project applicant is responsible for paying does not pertain to the adequacy of the IES/MND, but the project will be conditioned to pay standard City fees.

#### Response 2-9: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to how the parking lift would be enforceable. The commenter inquired as to how noise, energy demands, and potential for spill from operational equipment will be addressed. Furthermore the commenter inquired as to whether additional parking restrictions, ordinances, and enforcement costs would be necessary.*

There is no need to “enforce” the use of the garage lift. The building owner/property manager will instruct new homeowners how to properly utilize the garage lift, and detailed instructions will be provided to each new homeowner. Regarding energy demand, the garage lift is engineered with state-of-the-art technologies that result in an energy efficient system that is readily serviced by various energy providers. Regarding the commenter’s concern about hydraulic fluid spills, it is speculative to assume that a professionally engineered mechanical system that is successfully utilized in other urban communities will function improperly and result in fluid spills. Regarding parking, see Responses 2-7 and 2-8.

#### Response 2-10: Glen Miller Comments Regarding the Proposed Project

*The commenter recommended that the current stormwater, waste water, and storm drainage hazards be more thoroughly addressed and discussed.*

Water, sewer, and stormwater systems are addressed in detail in Section 15 of the IES/MND. Stormwater is also addressed in Section 8 of IES/MND, Hydrology. The IES/MND determined that all infrastructure impacts would be less-than-significant with implementation of appropriate mitigation measures.

#### Response 2-11: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to whether there would be a formal CDFG review and permit.*

See Response 1-11.

#### Response 2-12: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to whether there would be further City and regulatory review during project construction to ensure that no impacts would occur to the creek.*

Mitigation Measure 4 of the IES/MND requires that a qualified biologist shall be retained to oversee construction and ensure that no inadvertent take of California red-legged frog, steelhead, or western pond turtle occurs as a result of short-term disturbance near Mitchell Creek. Please refer to Mitigation Measure in the IES/MND for further detailed requirements.

Response 2-13: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to whether there would be conditions, penalties, mitigations, etc., sufficient to address and protect replacement of trees that are designated to be retained but do not survive.*

Mitigation Measure 5(b) of the IES/MND requires that the project shall conform to the City of Clayton Tree Protection Ordinance (Chapter 15.70 of the Zoning Code), through adherence to the Tree Preservation Guidelines called for in the Tree Report and provisions for replacement plantings, which will be incorporated into the Final Landscape Plan.

Response 2-14: Glen Miller Comments Regarding the Proposed Project

*The commenter noted that the arborist report does not provide a calculation as to the requirements of size and amount of replacement trees. The commenter further inquired as to how stringently the project will follow the tree ordinance.*

Please see Response 2-13 as well as Mitigation Measure 5(a) of the IES/MND.

Response 2-15: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to how the City/developer would insure and protect the City's residents, school property, and City's infrastructure in the event of flooding.*

As stated in Mitigation Measure 14 of the IES/MND the method of flood proofing shall include operating procedures and be subject to the approval of the City's Floodplain Administrator. The Floodplain Administrator will ensure that the final flood-proof system for the project will not adversely affect city residents, school property, and City infrastructure. It should also be noted that the approved and recently built Flora Square project will be utilizing a similar flood-panel system to protect project structures.

Response 2-16: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to how the existing infrastructure is impacted by flows and discharges from the recently approved residential, parking lot, and commercial development. Additionally, the commenter inquired as to whether the existing storm drain system is impacted at either upstream or downstream discharge points.*

As originally proposed for the project, runoff from the impervious areas created by the project is managed by routing storm water to the infiltration planters to treat the runoff. However, as noted in the Errata Sheet, attached as Appendix G to the Creekside Terrace IES/MND, the storm drain system proposed for the project has undergone minor revisions so that the runoff from the building roofs and private paved areas will be discharged to a sump located just north of the proposed trash enclosure for the project, and the runoff would then be pumped to an infiltration planter located on the City-owned parcel west of the creek. While this infiltration planter will have a minimum 18-inch depth of sandy loam with a minimum infiltration rate of 5 inches per

hour, and a 6-inch perforated underdrain pipe, the design also includes an overflow catch basin connected to an underground overflow pipe, that would, in certain storm events, discharge excess runoff overland through vegetated/grassy swales prior to entering downstream Mitchell Creek. In contrast, under current site conditions, after any on-site infiltration, stormwater that does not further penetrate into the site soils eventually gets collected in the City's storm drain system and conveyed into Mitchell Creek without any further treatment.

An additional 60 square foot at-grade planter would be located north of the proposed mixed-use building and would collect runoff from Drainage Management Area (DMA) 8, as shown on the Storm Water Control Plan (see Appendix B to the Creekside Terrace IES/MND). There currently exists a public storm drain pipe in the Oak Street right-of-way; however, the shallow depth of the system precludes it from being utilized for the project.

#### Response 2-17: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to how compliance with the Americans with Disabilities Act (ADA) is achieved in regards to this development project.*

As stated on page 6 of the IES/MND, project retail entrances are proposed to be at an elevation not exceeding a 2 percent cross-slope measured from the Oak Street sidewalk from the existing curb. This will allow for easy access to retail shops for pedestrians along Oak Street, and conformance with both City sidewalk standards and ADA requirements. The retail pad elevations, which would be implemented to achieve this proposed retail entry condition, will closely follow the existing terrain and result in close to a balanced cut/fill site.

#### Response 2-18: Glen Miller Comments Regarding the Proposed Project

*The commenter inquired as to whether the developer will be required to pay a portion of the required annual maintenance of the street improvements on High Street and Oak Street, or would the cost be absorbed by the City.*

Questions related to the types of infrastructure fees the project applicant is responsible for paying does not pertain to the adequacy of the IES/MND; therefore, these comments will be forwarded to the decision-makers for their consideration.

#### Response 2-19: Glen Miller Comments Regarding the Proposed Project

*The commenter called to attention to the interpretative center and noted that the area may have potential for safety hazards, vandalism, and /or liability. The interpretive center may create future costs due to increased need for police presence or patrol, maintenance, and insurance costs.*

As indicated on page 58 of the IES/MND, the development of the project would increase calls for police service, based on the construction phase and an increase in on-site population and improvements. Mitigation Measure 15 therefore requires the project developer to pay a standard fair share contribution to the City of Clayton for impacts to police staffing directly related to

impacts of the Creekside Terrace project for a five-year period. Of particular importance is the following statement in MM 15, which requires the Police Chief to approve the payment amount prior to issuance of a building permit for each project unit: “The calculation and payment shall be made at the time of issuance of building permit for each of the Project’s units (including residential and commercial units) and shall be approved in advance by the Clayton Police Chief and City Manager.”



Linda S. Adams  
Secretary for  
Environmental Protection



Department of Toxic Substances Control

Maziar Movassaghi, Acting Director  
700 Heinz Avenue  
Berkeley, California 94710-2721

Letter 3



Arnold Schwarzenegger  
Governor

3/27/09

**RECEIVED**

MAR 31 2009

CLAYTON COMMUNITY  
DEVELOPMENT DEPT.

Mr. David Woltering  
Community Development Department  
City of Clayton  
6000 Heritage Trail  
Clayton, California 94517

**RIVULET PROJECT**

Dear Mr. Woltering:

Thank you for the opportunity to review the Rivulet Project (Project) Mitigated Negative Declaration and associated Initial Study. The Department of Toxic Substances Control (DTSC) regulates management of hazardous waste and cleanup of hazardous substance release sites in California.

3-1

Mitigation Measure # 9 suggests that a site assessment will be conducted to determine if asbestos and lead based paint are present in materials used in construction of the two structures that are to be demolished as a part of the Project. If it is so determined, then abatement measures will be implemented. There is no indication in the Project documents provided that a site assessment was considered or conducted at the location of the Project. If a site assessment has not already been conducted, we suggest that the proposed site assessment be expanded to include a review of historic uses of the property and a site inspection to make a determination regarding the possibility of hazardous substances releases due to past uses or site activities.

If you have any questions, please contact me at (510) 540-3772.

Daniel Murphy, P.E.  
Unit Chief  
Brownfields & Environmental Remediation Program

**Comment 3, Comment Letter from the Department of Toxic Substances Control – March 31, 2009**

Response 3-1: Department of Toxic Substances Control Comments Regarding the Proposed Project

*The commenter stated that there is no indication that a site assessment was conducted at the location of the project, as is required by mitigation measures. The commenter suggests that additional site assessments be conducted for asbestos, cultural resources, and hazardous materials.*

In response to the commenter's request, Mitigation Measure 9 on pages 14 and 41 of the IES/MND is hereby revised as follows:

**Mitigation Measure 9.** Prior to issuance of a demolition permit by the City for any on-site structures, the Developer shall provide a site assessment, which determines whether any structures to be demolished contain asbestos. If any structures contain these materials or any other hazardous materials, the Developer shall submit an abatement plan consistent with local, state, and federal standards, subject to approval of the Contra Costa County Building Inspection Department. In addition, the site assessment shall include a site inspection and records review to determine the historic uses of the property, and whether any hazardous substances release(s) have occurred. If the assessment detects the presence of contaminated soils, a remediation plan consistent with local, state, and federal standards, shall be submitted for approval by the Contra Costa County Environmental Health Department. The abatement and remediation plan(s) shall identify the necessary measures that the applicant must comply with to fully remove any existing on-site hazards to the satisfaction of the Contra Costa County Environmental Health Department.

The above additions to Mitigation Measure 9 of the IES/MND do not affect the adequacy of the environmental analysis contained in the IES/MND. The above changes provide further details concerning the methodology of the site assessment required in MM 9.



CONTRA COSTA  
WATER DISTRICT

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Received

MAR 31 2009

City of Clayton

March 30, 2009

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Mr. Gary Napper  
City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517

**Subject: Contra Costa Water District's Drought Management Plan / New Connections.**

The Contra Costa Water District (District) is currently developing a Drought Management Plan (DMP) for consideration by the Board of Directors on April 1, 2009. The plan is being developed to address continued drought conditions in the State of California and the anticipated significant reduction in the District's water allocation from the United States Bureau of Reclamation (USBR).

Despite the recent rainfall and snowpack increases, water supplies remain critically low and the District's Board will decide on April 1 the reduction targets to be included in the drought management program.

For Applicants planning new construction within the District's Treated Water Service Area, the proposed DMP will have the following implications:

4-1

- No NEW irrigation services will be allowed. Applicants will have the option to pay the associated Facility Reserve Charge (FRC) for new irrigation meters to secure the capacity at the current FRC. However, new meters will not be set until the DMP has been lifted by the District's Board of Directors. If applicants select this option, the monthly Service and Demand Charge must also be paid to keep the meter active and to maintain the FRC value.
- No NEW landscaping will be allowed until the DMP has been lifted by the District's Board of Directors.

These restrictions will be effective on May 1, 2009 and will remain in effect until the program has been lifted by the District's Board of Directors. For Applicants that are requesting irrigation meters, a completed application, including signed improvement plans, signed agreements and payment must be received prior to May 1, 2009 to ensure that the landscape meter will be installed and activated. While the District will install and activate irrigation

**Contra Costa Water District's Drought Management Plan / New  
Connections**  
March 30, 2009  
Page 2 of 2

meters for completed applications received prior to May 1, 2009, a water budget will be developed for these new meters/accounts, and this water budget will be focused on curbing or eliminating outdoor water use.

The District recognizes the potential impacts the DMP may have on your projects and will continue to keep the developer community informed. More information on the drought and water conservation can be found on the District's website at [www.ccwater.com](http://www.ccwater.com). If you have any additional questions or would like to discuss this further, please don't hesitate to contact me at my direct line, 688-8013.

Sincerely



Richard Broad  
Engineering Services Coordinator

RL/RAB:dml

File: 34

#### **Comment 4, Comment Letter from Contra Costa Water District – March 31, 2009**

##### Response 4-1: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter has stated that no new irrigation services or landscaping would be allowed on the project site until the Drought Management Plan has been lifted by the District's board of Directors.*

Consistent with the newly adopted Contra Costa Water District Drought Management Plan (DMP), new landscaping will not be installed on the project site until such time that the DMP has been lifted by the District's Board of Directors. The only exception to this pertains to the project landscaping that is required for the project to satisfy C.3 requirements. The Contra Costa Water District Board will be considering changes at its April 7, 2010 meeting to allow irrigation meters to be installed along with an approved water budget, following review and acceptance of a proposed landscape plan (personal communication between Richard Broad, Engineering Services Coordinator, CCWD, and David Woltering, Clayton Community Development Director, 3-23-2010).



**SAVE MOUNT DIABLO**

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*Website*  
www.savemountdiablo.org

*Founders*  
Arthur Bonwell  
Mary L. Boverman

*Proud member of*  






April 2, 2009

David Woltering  
Community Development Director  
6000 Heritage Trail  
Clayton, CA 94517

**RECEIVED**

APR 9 2009

CLAYTON COMMUNITY  
DEVELOPMENT DEPT.

Re: Rivulet Project Mitigated Negative Declaration

Mr. Woltering,

Save Mount Diablo appreciates the work of staff in the preparation of the Mitigated Negative Declaration for the Rivulet project and the opportunity to make comments on the document.

**Save Mount Diablo's Interests**

Save Mount Diablo's major concern with the project was the potential impact the demolition of the current buildings and the construction of new buildings would have on Mitchell creek and the habitat that the creek provides for wildlife.

With its headwaters in Mount Diablo State Park, Mitchell creek flows through the project site before draining into Mt. Diablo creek, providing habitat to a variety of species at different sections. The section of Mitchell creek that crosses the Rivulet property contains riparian habitat characteristics with a number of healthy trees and other features associated with stream corridors.

Unfortunately, the creek area has experienced a substantial amount of disturbance resulting from foot traffic and erosion. The section of the creek adjacent to the project site is further threatened by invasive non-native plants species that are crowding out the native species.

The Rivulet project site is located in close proximity to the creek corridor – as close as ten feet in most places – and has the potential to exacerbate negative impacts on the creeks biotic resources. However, with smart design and thoughtful mitigation measures the project also has the opportunity to enhance Mitchell creek and its riparian resources.

**Save Mount Diablo's Position**

Overall, Save Mount Diablo believes that the applicant and the City of Clayton have made a commendable effort to ensure Mitchell creek and the creek's associated sensitive resources are preserved and enhanced. The project planning and mitigation

*Save Mount Diablo Comments, Rivulet Project Mitigated Negative Declaration, City of Clayton, April 2, 2009.*

measures included in the project have pacified many of the issues that we had identified as potential impacts. However, there are a few questions and comments Save Mount Diablo has concerning the project's potential impacts to Mitchell Creek.

**Comments**

*Conservation Easement*

Mitigation Measure 16 states "The project developer shall agree to the recordation of a conservation easement on the third parcel located west of Mitchell Creek, and shall assume full responsibility for the ongoing maintenance and upkeep of the parcel as well as the terminus of Center Street." (Rivulet MND Pg. 60)

5-1

It appears as though only the western post parcel, or the "triangle" parcels would be placed under a conservation easement before the lot lines are merged. Save Mount Diablo believes this conservation easement should extend across Mitchell creek and cover the setback area between the creek and the new building. The total area from the western boundary of the "triangle" parcel proposed for the easement, across the creek and onto the two eastern parcels up to the back of the new building should be included in the conservation easement.

5-2

Additionally, Save Mount Diablo would like to review the form of the conservation easement to get a better understanding as to how it would protect the property. If the easement does not provide strong enough protections for the area's resources, the project would still result in a potentially significant impact. We would also like to know to whom the easement will be dedicated. Furthermore, will the easement area have public access or include any trails for the general public?

*Creek Setback*

Save Mount Diablo has noted that the new buildings will be located no closer to the creek than the existing buildings and in many places the creek setback will be greater than it is currently. One of our chief concerns was that the new buildings would encroach further into the creek corridor than the existing buildings and impact the area's riparian resources. Save Mount Diablo supports and appreciates the applicant's efforts to maintain and equal or greater distance from the creek.

5-3

However, there does not appear to be any permanent protection of the areas separating the creek from the new building. While this project sites the new buildings in a location that prevents further encroachment into the creek area, future projects may propose the construction of an addition to the building which extends into the riparian area. The MND states that "the new structure would be setback at least as far as the existing structures, and access would be restricted away from the creek." (Rivulet MND Pg. 30) However, there is no discussion about how the area would be protected from any further projects proposing construction in the area.

Save Mount Diablo believes the mitigation measures for the project should include a setback that provides permanent protection for the area between the proposed buildings and the creek. This area should be placed under the conservation easement that is proposed for the property to the west of the creek.

5-4

*California Department of Fish and Game*

One of the mitigations proposed for the project is a restoration plan which includes removal of non-native invasive plant species, such as the tree-of-heaven, and the planting native riparian

5-4  
Continued

species to enhance the health of the riparian corridor. Save Mount Diablo supports this proposed mitigation measure and believes that the creek corridor will benefit from the restoration project

5-5

The Mitigated Negative Declaration states that "informal consultation with the CDFG indicates that the creek corridor modifications proposed as part of the project would not require their authorization under the Streambed Alteration Agreement process." (Rivulet MND Pg. 30)

Save Mount Diablo believes an official letter from the Department should be obtained and that the letter should be included in the final CEQA documentation for the project.

5-6

*Other Project Components*

In addition to the measure included to protect and enhance the creek, Save Mount Diablo would like to commend the applicant for a few other components of the project.

Mixed use development is one of the major tenets of the type of smart growth development which is being encouraged by State and regional agencies to curb global warming. Infill, mixed-use project are precisely the type of development that SMD supports.

Also, the interpretive site that will be created to educate residents about the creek will be a nice feature that helps to support the natural resources of the area.

Thank you for your consideration of our comments.

Sincerely,



Troy Bristol  
Land Conservation Associate  
Save Mount Diablo

## **Comment 5, Comment Letter from Save Mount Diablo – April 2, 2009**

### Response 5-1: Save Mount Diablo Comments Regarding the Proposed Project

*The commenter states that only the westernmost parcel would be placed under a conservation easement before lot lines are merged. The commenter asks that the conservation easement be extended to cover the setback area between Mitchell Creek and the new building.*

The conservation easement is intended to extend along the eastern bank of Mitchell Creek, which would include landscaping, as illustrated in Exhibit 4 of the Creekside Terrace IES/MND. However, there will be provisions in the easement language allowing any needed access to the west side of the project structure for maintenance and/or repair purposes. While development would be excluded within the overall easement area, limited improvements would be allowable to properly maintain this area, if needed. Since the release of the original Rivulet Project IES/MND, Mitigation Measure 16 has been revised as follows:

**Mitigation Measure 16.** The Project developer shall agree to the recordation of a conservation easement on the third parcel located west of Mitchell Creek, and shall assume full responsibility for the ongoing maintenance and upkeep of the parcel as well as the terminus of Center Street. The conservation easement shall preclude future development of said parcel while still allowing limited improvements, such as the proposed infiltration planter associated with the Creekside Terrace project.

### Response 5-2: Save Mount Diablo Comments Regarding the Proposed Project

*The commenter would like to review the form of the conservation easement in order to obtain a better understanding of how the easement would protect the property. The commenter also inquired as to whom the easement would be dedicated, and would the easement have public access or include any trails for the general public.*

The easement will be dedicated to the property owner, who will be responsible for the long-term maintenance of the open space area. No public trails will be included on the open space parcel west of Mitchell Creek. The intent is to preclude development and to maintain appropriate riparian or other suitable vegetation in this area.

### Response 5-3: Save Mount Diablo Comments Regarding the Proposed Project

*The commenter requested that the mitigation measures for the project include a setback that provides permanent protection for the area between the proposed buildings and Mitchell Creek.*

Please see Response 5-1.

### Response 5-4: Save Mount Diablo Comments Regarding the Proposed Project

*The commenter supports the proposed mitigation measure that includes the removal of non-native invasive plant species.*

The comment does not address the adequacy of the IES/MND, but rather expresses support for the proposed restoration of Mitchell Creek riparian vegetation.

Response 5-5: Save Mount Diablo Comments Regarding the Proposed Project

*The commenter requested an official letter from the CDFG stating their conclusion that the creek corridor modifications proposed as part of the project would not require their authorization under the Streambed Alteration Agreement Process.*

Please see Response 1-11.

Response 5-6: Save Mount Diablo Comments Regarding the Proposed Project

*The commenter commended the applicant for the use of infill, mixed-use design, as well as the interpretive site that will help educate residents about the creek.*

The comment does not address the adequacy of the IES/MND, but rather expresses support for the proposed mixed use design of the Creekside Terrace project.



ARNOLD SCHWARZENEGGER  
GOVERNOR

STATE OF CALIFORNIA  
GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT



CYNTHIA BRYANT  
DIRECTOR

April 6, 2009

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APR 7 2009

CLAYTON COMMUNITY  
DEVELOPMENT DEPT.

David Woltering  
City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517

Subject: Rivulet Project  
SCH#: 2009032006

Dear David Woltering:

6-1

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on April 2, 2009, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts  
Director, State Clearinghouse

**Comment 6, Comment Letter from the Governor’s Office of Planning and Research, State Clearinghouse and Planning Unit – April 7, 2009**

Response 6-1: State Clearinghouse Comments Regarding the Proposed Project

*The commenter acknowledged that the applicant has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.*

The comment does not address the adequacy of the IES/MND.

Letter 7



CONTRA COSTA  
WATER DISTRICT

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APR 9 2009

CLAYTON COMMUNITY  
DEVELOPMENT DEPT.

April 8, 2009

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Vice President

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John A. Burgh

Walter J. Bishop  
General Manager

VIA FACSIMILE (925) 672-4917  
Hard Copy to Follow

Mr. David Woltering  
Community Development Department  
City of Clayton  
6000 Heritage Trail  
Clayton, CA 94517

Subject: Rivulet Project – Initial Environmental Study/Mitigated  
Negative Declaration

Dear Mr. Woltering:

The Contra Costa Water District (CCWD) is in receipt of an Agency Comment Request for review of the re-development of two properties on the west side of Oak Street between High and Center Streets in Clayton. The project involves ground floor retail and seven second-story residential units and a community room. The project is within CCWD's treated water service area and CCWD is the local water service provider for this project. Both parcels are served by the 8-inch water main in Oak Street. New services will need pressure reducing valves. Separate fire services and landscape meters may be required.

CCWD recommends that service conditions for approving the project include the following:

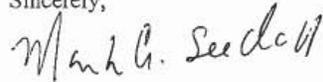
- 7-1 - Treated and Untreated water service is governed by CCWD Code of Regulations Section 5 (Reg 5).
- 7-2 - Existing water infrastructure will need to be evaluated and any modifications will need to be designed and constructed at the Developer's / Owner's expense.
- 7-3 - Each premise to be provided domestic service will require its own service connection and meter (Reg. 5.32.020).
- 7-4 - A separate meter for landscape irrigation may be required (Reg. 5.32.020).
- 7-5 - A separate fire service may be required for each building or premise (Reg. 5.24.030).
- 7-6 - Water service will likely require backflow prevention devices, which could reduce water pressure. Proper planning is necessary to ensure backflow prevention devices are located appropriately.

Mr. David Woltering  
City of Clayton  
April 8, 2009  
Page 2

- |     |   |
|-----|---|
| 7-7 | - Further information and answers to a number of frequently asked questions regarding water service and District regulations can be found on the District's web site at <a href="http://www.ccwater.com">www.ccwater.com</a> .  |
| 7-8 | - The District recommends Applicant submit an application for service or an application for a "Shotgun" estimate for this project, so that the District can provide a more detailed analysis and review.  |
| 7-9 | - The District is developing a plan to address the ongoing drought conditions in California. It is possible that the drought will impact the amount of water available to new and existing District customers. Further information on the drought and its impacts on water allocation and new service connections can be found on the District's web site at <a href="http://www.ccwater.com">www.ccwater.com</a> . It is recommended that all plans, particularly irrigation and landscape plans, be reviewed by the District to ensure consistency with the District's drought management plans. If the project or property is not within the District's Treated Water Service Area, please contact the municipality providing service to understand how you may be affected. |

Please contact Richard Broad at CCWD regarding water service issues at (925) 688-8013. Alternatively, I may be contacted at (925) 688-8119 should you have further questions.

Sincerely,



Mark A. Seedall  
Senior Planner

MAS/jmt/rlr

**Comment 7, Comment Letter from Contra Costa Water District – April 9, 2009**

Response 7-1: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter recommended that treated and untreated water service is governed by CCWD Code of Regulations Section 5.*

The comment provides one of the District’s standard service conditions, which the project will be required to comply with. CCWD’s standard conditions will be included as necessary in the project conditions of approval.

Response 7-2: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter recommended that the existing water infrastructure would need to be evaluated and any modifications will need to be designed and constructed at the developer’s/owner’s expense.*

The comment provides one of the District’s standard service conditions, which the project will be required to comply with. CCWD’s standard conditions will be included as necessary in the project conditions of approval.

Response 7-3: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter recommended that each premise, in order to be provided domestic service, will require an individual connection and meter.*

The comment provides one of the District’s standard service conditions, which the project will be required to comply with. CCWD’s standard conditions will be included as necessary in the project conditions of approval.

Response 7-4: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter recommended that a separate meter for landscape irrigation be required.*

The comment provides one of the District’s standard service conditions, which the project will be required to comply with. CCWD’s standard conditions will be included as necessary in the project conditions of approval.

Response 7-5: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter recommended that a separate fire service be required for each building or premise.*

The comment provides one of the District’s standard service conditions, which the project will be required to comply with. CCWD’s standard conditions will be included as necessary in the project conditions of approval.

Response 7-6: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter stated that water service would likely require backflow prevention devices, which would reduce water pressure. The commenter noted that proper planning is necessary to ensure backflow prevention devices are located appropriately.*

The comment provides one of the District's standard service conditions, which the project will be required to comply with. CCWD's standard conditions will be included as necessary in the project conditions of approval.

Response 7-7: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter noted that further information and answers to frequently asked questions regarding water service and District regulations can be found on the District's web site.*

The comment is for informational purposes only.

Response 7-8: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter recommended that applicants submit an application for service or an application for an estimate of the project, so the District can provide a more detailed analysis and review.*

The comment does not address the adequacy of the IES/MND and has been forwarded to the project applicant.

Response 7-9: Contra Costa Water District Comments Regarding the Proposed Project

*The commenter recommended that considering current drought conditions, all plans, particularly irrigation and landscape plans, be reviewed by the District to ensure consistency with the District's drought management plans.*

Please see Response 3-1 above.

# **Appendix G**

## **Errata Sheet**

**Creekside Terrace IES/MND**  
**Initial Environmental Study/Negative Declaration ENV 01-08**

**Errata Sheet**  
**May 17, 2010**

This Errata presents, in ~~strike-through~~ and double-underline format, the revisions to the former Rivulet Project IES/MND (March 2009) needed to reflect the most recent project application. The changes to the original “Rivulet” project design are very minor, and generally include an additional 200 square feet of ground floor retail and revised storm drain system design.

This Errata also presents the changes to the former Rivulet Project IES/MND resulting from the responses to public comments submitted on the Rivulet Project IES/MND (see Appendix F to the Creekside Terrace IES/MND).

The revisions reflected in this IES/MND do not affect the adequacy of the previous environmental analysis contained in the “Rivulet Project” IES/MND. Generally, the changes provide clarification concerning the current development application, and in some cases, further details concerning the methodology of certain mitigation measures. Regarding the addition of Section 4, *Greenhouse Gas Emissions*, this section has been added per the State’s recent amendment of Appendix G of the CEQA Guidelines. The additional climate change information added to the Creekside Terrace IES/MND does not result in any new significant impacts associated with the proposed project. The included analysis is for informational purposes, most specifically, in order to demonstrate how the Creekside Terrace project achieves many of the design objectives identified by various authorities to reduce greenhouse gas emissions. In summary, the changes to the previous IES/MND do not result in any new significant impacts; subsequently, there is no need to recirculate the Creekside Terrace IES/MND.

**Cover Page**

The project name and document date have been revised to reflect the new project name and release date, respectively.

**Table of Contents**

The List of Exhibits has been revised to add a reference to the newly added Vesting Tentative Map exhibit.

## Introduction

The Introduction section on page 1 of the IES/MND has been revised to add the following three paragraphs to provide a background discussion and additional relevant introductory material:

The original development application for the subject properties was for a very similar mixed use project, entitled "Rivulet." For this original development application, the City, in concert with its environmental consultant for the project, prepared an Initial Environmental Study/Mitigated Negative Declaration (IES/MND) to adequately evaluate the potential environmental impacts of the proposed "Rivulet" Project. The IES/MND was released for a 30-day public review period from March 2, 2009 to April 2, 2009. A total of six (6) public comment letters were received during the 30-day review period and one public comment hearing on the IES/MND was held before the Planning Commission during the review period. Shortly after the hearing, the project was put on hold due to the depletion of funds in the applicant's account and his failure to replenish the deposit account.

In the interest of completing the environmental review process and getting the project site entitled for development of a mixed use project, the Clayton Redevelopment Agency has now become the applicant. In addition, a slightly revised project application has been submitted by the Redevelopment Agency and the project re-titled to "Creekside Terrace." This IES/MND presents, in strike-through, underline format, the revisions needed to reflect the most recent project application. The changes to the original "Rivulet" project design are very minor, and generally include a reallocation of 200 square feet of ground floor residential entry space to retail space and revisions to the storm drain system design. This revised IES/MND also includes changes resulting from the responses to public comments submitted on the March 2009 Rivulet Project IES/MND (see Appendix F). Also attached, as Appendix G to this revised IES/MND, is an Errata Sheet, which includes a listing of all changes to the IES/MND as a result of public comment or in response to the most recent development application.

The revisions reflected in this IES/MND do not affect the adequacy of the previous environmental analysis contained in the "Rivulet Project" IES/MND. Generally, the changes provide clarification concerning the current development application, and in some cases, further details concerning the methodology of certain mitigation measures. Regarding the addition of Section 4, *Greenhouse Gas Emissions*, this section has been added per the State's recent amendment of Appendix G of the CEQA Guidelines. The additional climate change information added to the Creekside Terrace IES/MND does not result in any new significant impacts associated with the proposed project. The included analysis is for informational purposes, most specifically, in order to demonstrate how the Creekside Terrace project achieves many of the design objectives identified by various authorities to reduce greenhouse gas emissions. In summary, the changes to the previous IES/MND do not result in any new significant impacts; subsequently, there is no need to recirculate the Creekside Terrace IES/MND.

In addition, pages 1 and 2 of the Introduction section are hereby revised to change the project name, correct one minor typographical error, and add Hazards and Hazardous Materials among the list of topics where potentially significant environmental impacts were identified. It is important to note that the original IES/MND already identified a potentially significant hazards impact resulting from the project. A reference to this potential impact was simply inadvertently omitted from the list of potentially significant impacts on page 2.

The City holds public title to the underlying land and improvements on three (3) parcels located on the west side of Oak Street between High and Center Streets in the Town Center area. These three parcels will be merged along with the use of a portion (terminus) of unimproved Center Street right-of-way by License Agreement from the City of Clayton to create a parcel for the development of the ~~Rivulet~~ Creekside Terrace project. Two of these parcels are improved with single-story modular buildings; the buildings on APN 119-050-034 ~~was~~were previously occupied by PERMCO, Inc. (City Engineer firm) and the building on APN 119-050-009 was previously occupied by Clayton Mind and Body Spa. The third parcel, APN 119-050-034, is unimproved and traversed by Mitchell Creek along its eastern edge. The existing improvements would be removed as part of the proposed project construction activities. Immediately adjacent to the north is the largely-unused right-of-way/open space extension to Center Street. It is highly unlikely that Center Street will ever be extended up the hillside.

This Initial Environmental Study/Mitigated Negative Declaration identifies potentially significant environmental impacts for the following environmental areas:

- Air Quality;
- Biological Resources;
- Cultural Resources;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Hydrology; and
- Public Services.

### **Project/Applicant Information**

This section, on page 3 of the IES/MND has been revised to reflect the new project applicant and project name.

In addition, the first full paragraph on page 3 of the IES/MND has been revised to reflect the small increase in ground floor retail square footage associated with the new project application. As demonstrated throughout the rest of the Creekside Terrace IES/MND this small increase in square footage does not result in any new significant impacts.

The first floor is comprised of approximately 7,000200 square feet of retail commercial space with a 20-foot ceiling.

Page 4 of the IES/MND has been revised to clarify the categories of impacts included in each checklist section of the IES/MND. In addition, a category for “greenhouse gas emissions” has been added to the table on page 4, consistent with the recent amendments to the CEQA Guidelines, Appendix G.

The environmental factors checked below would be potentially affected by this project. The following Evaluation of Environmental Impacts identifies at least one impact that is a ~~"Potentially Significant Impact" or "Potentially Significant Unless Mitigated~~Less Than Significant with Mitigation Incorporated" for each of the checked environmental factors.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Aesthetics                           | <input type="checkbox"/> Agriculture                                | <input checked="" type="checkbox"/> Air Quality         |
| <input checked="" type="checkbox"/> Biological Resources      | <input checked="" type="checkbox"/> Cultural Resources              | <input checked="" type="checkbox"/> Geology and Soils   |
| <input type="checkbox"/> <u>Greenhouse Gas Emissions</u>      | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology           |
| <input type="checkbox"/> Land Use and Planning                | <input type="checkbox"/> Mineral Resources                          | <input type="checkbox"/> Noise                          |
| <input type="checkbox"/> Populations and Housing              | <input checked="" type="checkbox"/> Public Services                 | <input type="checkbox"/> Transportation and Circulation |
| <input type="checkbox"/> Water, Sewer, and Stormwater Systems | <input type="checkbox"/> Mandatory Findings of Significance         |   |

## Background

Page 6 of this section of the IES/MND has been revised to reflect the new project name.

## Project Description

Page 6 of this section of the IES/MND has been revised to reflect the new project name, the small increase in ground floor retail square footage, and the inclusion of a laundry/storage room.

Page 7 of this section of the IES/MND has been revised as follows to clarify the process for Center Street right-of-way:

### Center Street and Associated Improvements

The City is proposing to grant approval of a License Agreement for the use of a portion of ~~abandon~~ the Center Street right-of-way directly north of the project site given the unlikelihood of extending Center Street across the Mitchell Creek and up the hill to the Mt. Diablo Unified School District property.

Exhibit 3, Site Plan, on page 10 of the IES/MND has been revised to include the latest project site plan, as described in the IES/MND.

Exhibit 4, Preliminary Landscape Plan, on page 11 of the IES/MND has been revised to include the latest preliminary landscape plan for the project.

Page 12 of the IES/MND has been revised to reflect the new project name and include an exhibit reference (Exhibit 5) for the Vesting Tentative Map. The word “vesting” has also been added to reflect the specific map entitlement being sought for the project. In addition, language has been added to clarify the project entitlements (none of which have changed since the preparation of the original Rivulet Project IES/MND), as follows:

### Lot Line Adjustment (LLA 01-08)

The lot lines currently between the southern parcel (APN 119-050-034), northern parcel (APN 119-050-009), and the undeveloped parcel west of the ~~Rivulet~~ Creekside Terrace

development site (APN 119-050-008) are proposed to be merged. Additionally, the right-of-way associated with the terminus of Center Street is proposed to be available for use by means of a License Agreement from the City of Clayton~~abandoned~~ and ~~joined~~ merged with the area of the three parcels. The project includes a request for the approval of a lot line adjustment to merge these properties into a single parcel.

#### Tentative Subdivision Map (MAP 01-08)

The applicant is requesting the approval of a Vesting Tentative Map to subdivide the upper floor into seven (7) for-sale condominiums and related open space areas and ground floor commercial (see **Exhibit 5**). One of the units shall be restricted for sale and resale to a very low- or low-income qualified household term of no less than 45 years, per California Redevelopment Law.

#### Development Plan (DP 01-05)

According to the *Zoning Ordinance* (Section 17.28.050), a Development Plan is required for properties zoned PD District if the proposed project involves residential uses of 5 lots or more. Because the project involves the construction of seven residential units, a Development Plan is required.

#### **Discretionary Actions**

Approval of the Project requires the following discretionary actions by the City:

- ~~Abandonment~~ Approval of a license agreement for use of right-of-way;
- Approval of a lot line adjustment;
- Approval of a vesting tentative map for seven for-sale residential condominiums and four to five commercial condominiums; and,
- Approval of a development plan.

#### **List of Mitigation Measures**

Mitigation Measure 1, Air Quality, on page 14 of this section of the IES/MND (and page 29 of Section 4), has been revised per Response to Comment 1-4 (see Appendix F to the Creekside Terrace IES/MND). The below change does not affect the adequacy of the current environmental analysis in the IES/MND, but rather serves to clarify who the designated compliance officer will be for Mitigation Measure 1 of the IES/MND.

#### **Air Quality**

**Mitigation Measure 1.** The following measures shall be adhered to during all construction phases of the Project:

- Earthmoving or other dust-producing activities shall be suspended during periods of high winds, (i.e., instantaneous wind gusts of 25 mph or greater);
- All exposed or disturbed soil surfaces shall be watered at least twice daily on any day of high winds or when construction activities occur, including weekends and holidays;
- Stockpiles of debris, soil, sand or other materials that can be blown by the wind, shall be watered with a soil stabilizer or covered;
- Construction areas, adjacent streets, and routes for construction traffic shall be swept of all mud and debris by a water sweeper on a daily basis (minimum) on any day when construction activities occur, including weekends and holidays;

- All trucks hauling soil, sand, or other loose materials shall be covered or maintain at least two feet of freeboard;
- A compliance officer (City Engineer unless otherwise identified as part of the grading permit process), shall be responsible for implementation and monitoring ~~shall be identified as part of the grading permit process of the above requirements.~~

Mitigation Measures 4 (a), Biological Resources, on page 15 of this section of the IES/MND (and page 38 of Section 5), has been revised per Response to Comment 1-6 (see Appendix F to the Creekside Terrace IES/MND). In addition, in order to address the construction of the newly proposed infiltration planter on the west side of the creek, Mitigation Measure 4(b) has been revised as follows:

**Mitigation Measure 4.** A qualified biologist shall be retained to oversee construction and ensure that no inadvertent take of California red-legged frog, steelhead, or western pond turtle occurs as a result of short-term disturbance near Mitchell Creek. This shall include the following provisions:

- a) Prior to any grading or grubbing of the site, the qualified biologist shall conduct a preconstruction survey to confirm absence of any California red-legged frog, steelhead, or western pond turtle on the site, as called for in Mitigation Measure 3. A report summarizing the survey results shall be submitted to the Community Development Director.
- b) Silt fencing shall be installed at the west edge of the construction zone and to the east and west of the top of bank, buried a minimum of six inches and extending a minimum of two feet above grade, to serve as a barrier to keep ground mobile wildlife dispersing along the creek corridor from entering the construction zone. The fencing shall remain in place during the entire construction period.

The above changes do not affect the adequacy of the environmental analysis in the IES/MND, but, for MM 4(a), simply ensure that the City of Clayton will receive the results of the preconstruction survey; and for MM 4(b), ensure adequate protection zones for wildlife along both sides of the creek during construction.

Mitigation Measure 6, Cultural Resources, on page 16 of this section of the IES/MND (and page 44 of Section 6) has been revised per Response to Comment 1-7 (see Appendix F to the Creekside Terrace IES/MND). The below changes do not affect the adequacy of the environmental analysis in the IES/MND, but rather provide another mechanism to ensure that no cultural resources are adversely impacted.

**Mitigation Measure 6.** Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, an archaeological monitor shall be retained by the applicant and approved by the City to train the construction grading crew prior to commencement of earth-grading activity in regard to the types of artifacts, rock, bone, or shell that they are likely to find, and when work shall be stopped for further evaluation. One trained crew member shall be on-site during all earth moving activities, with the assigned responsibility of “monitor.” Should archeological, historical, or Native American artifacts or remains be discovered during construction of the Project, work in the vicinity of the find shall stop immediately until a ~~qualified archeologist or paleontologist (approved by the Community Development Director), as appropriate, the~~

~~resource(s) can~~ are evaluated and the site and determine the significance of the find the appropriate means of curation is determined Project personnel shall not collect or alter cultural resources. Identified cultural resources shall be recorded on forms DPR 422 (archeological sites) and/or DPR 523 (historic resources).

Since the release of the original Rivulet Project IES/MND, the City has determined that Mitigation Measure 7, Geology and Soils, on page 16 (and page 47 of Section 7) of the IES/MND, requires certain minor clarifications, as follows:

**Mitigation Measure 7.** Prior to the approval of ~~improvement~~ building foundation plans, the plans shall indicate the anchoring of project structures to the bedrock or the construction of a subterranean retaining wall, for review and approval ~~of by the City Engineer~~ project soils engineer and the County Building Department.

The above changes do not affect the adequacy of the environmental analysis in the IES/MND, but rather provide clarification regarding timing and responsible parties.

Mitigation Measure 9, Hazards and Hazardous Materials, on pages 16 and 17 (and page 50 of Section 8) of the IES/MND, has been revised per Response to Comment 3-1 (see Appendix F to the Creekside Terrace IES/MND). The below additions to Mitigation Measure 9 of the IES/MND do not affect the adequacy of the environmental analysis contained in the IES/MND. The above changes provide further details concerning the methodology of the site assessment required in MM 9.

**Mitigation Measure 9.** Prior to issuance of a demolition permit by the City for any on-site structures, the Developer shall provide a site assessment, which determines whether any structures to be demolished contain asbestos. If any structures contain these materials or any other hazardous materials, the Developer shall submit an abatement plan consistent with local, state, and federal standards, subject to approval of the Contra Costa County Building Inspection Department. In addition, the site assessment shall include a site inspection and records review to determine the historic uses of the property, and whether any hazardous substances release(s) have occurred. If the assessment detects the presence of contaminated soils, a remediation plan consistent with local, state, and federal standards, shall be submitted for approval by the Contra Costa County Environmental Health Department The abatement and remediation plan(s) shall identify the necessary measures that the applicant must comply with to fully remove any existing on-site hazards to the satisfaction of the Contra Costa County Environmental Health Department.

Since the release of the original Rivulet Project IES/MND, the City has determined that Mitigation Measure 10, Hydrology, on page 17 (and page 54 of Section 9) of the IES/MND, requires certain minor clarifications, as follows:

**Mitigation Measure 10.** Prior to the issuance of building permits, the developer shall ~~obtain and comply with the NPDES general permit including the submittal of a Notice of Intent and associated fee to the State Water Resources Control Board and the preparation of a Storm Water Pollution Prevention Control Plan that includes both construction stage and~~

permanent storm water pollution prevention practices to be submitted to the City Engineer for review.

The above changes do not affect the adequacy of the environmental analysis in the IES/MND, but rather provide clarification regarding the required process and responsible parties.

Mitigation Measure 15, Public Services, on page 18 (and page 68 of Section 14), has been revised to reflect the new project name, as follows:

**Mitigation Measure 15.** The Project developer shall pay a fair share contribution to the City of Clayton for impacts to police staffing directly related to impacts of the ~~Rivulet Creekside Terrace~~ Project for a five-year period. The calculation and payment shall be made at the time of issuance of building permit for each of the Project's units (including residential and commercial units) and shall be approved in advance by the Clayton Police Chief and City Manager.

Since the release of the original Rivulet Project IES/MND, the City has determined that Mitigation Measure 16, Public Services, on page 18 (and page 69 of Section 14) of the IES/MND, requires certain minor clarifications, as follows:

**Mitigation Measure 16.** The Project developer shall agree to the recordation of a conservation easement on the third parcel located west of Mitchell Creek, and shall assume full responsibility for the ongoing maintenance and upkeep of the parcel as well as the terminus of Center Street. The conservation easement shall preclude future development of said parcel while still allowing limited improvements, such as the proposed infiltration planter associated with the Creekside Terrace project.

The above change does not affect the adequacy of the environmental analysis in the IES/MND, but rather provides clarification regarding the specific activities allowable on the conservation easement parcel.

## **VI. Evaluation of Environmental Impacts**

### **1. Aesthetics**

Under Question (d) of the Aesthetics section, page 20 of the IES/MND, the text has been revised to reflect the minor increase in ground floor retail square footage.

#### 4. Greenhouse Gas Emissions

Section 4, *Greenhouse Gas Emissions*, has been added to the IES/MND per the State's recent amendment of Appendix G of the CEQA Guidelines, and in response to Comment 1-22 (see Appendix F to the Creekside Terrace IES/MND). The additional climate change information added to the Creekside Terrace IES/MND does not result in any new significant impacts associated with the proposed project. The included analysis is for informational purposes, most specifically, in order to demonstrate how the Creekside Terrace project achieves many of the design objectives identified by various authorities to reduce greenhouse gas emissions.

#### 4. GREENHOUSE GAS EMISSIONS

<b>Issues</b>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
<u>Would the project:</u>				
a) <u>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <u>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ..... Less-Than-Significant**

**b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ..... Less-Than-Significant**

#### Discussion

#### Background

There is evidence that the Earth's climate has been warming over the past century because of the buildup in the atmosphere of greenhouse gases (GHGs) emitted from human activity. Greenhouse gases have varying global warming potentials. The major components of greenhouse gases include carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O) and

methane, (CH<sub>4</sub>). Ozone is a greenhouse gas; however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and therefore is not global in nature. The burning of fossil fuels is the largest source of GHGs, particularly carbon dioxide. Greenhouse gases act much like a blanket, trapping the Earth's heat in the atmosphere and resulting in an increase in the global mean temperature. A warmer global climate could have significant effects on local and regional weather patterns, agricultural production, flooding and water resources, and the distribution of plant and animal species among other impacts.

In 2006, California enacted the California Global Warming Solutions Act (AB 32). The Act requires California to reduce its emission of GHGs to the statewide level emitted in 1990 by 2020. The Act charges the California Air Resources Board (CARB) with the task of developing, with public input, a plan for reducing GHG emissions and implementing that plan by January 2012.

As directed by SB97, the Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010. Amended CEQA Guidelines Section 15064.4, states that, in determining the significance of greenhouse gas emissions, a "lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- (2) Rely on a qualitative analysis or performance based standards."

As demonstrated below, calculating the approximate GHG emissions from automotive vehicles that would result from buildout of the proposed project is possible; however, it should be noted that the emissions calculations have significant limitations. These calculations allow the user to estimate GHG emissions in pounds per day or tons of CO<sub>2</sub> per year for various land uses and projects. However, the GHG emissions calculations presented here only evaluate and model aggregate CO<sub>2</sub> emissions – they do not demonstrate, with respect to a global impact, how much of these aggregate emissions are in fact "new" emissions specifically attributable to the development resulting from approval of the proposed project.

The proposed project for the most part would not "create" GHG emissions. Instead, by adding businesses and residents to the area, the project would create conditions under which emissions would "move" from one area to another, as an existing driver moves from one area to the other. This fact is critically important, because the approval of the proposed project would not directly result in the creation of new drivers – the primary source of the proposed project's emissions. Thus, the use of models that measure overall emissions, without accounting for existing emissions, overstates the proposed project's impact related to GHG emissions. Overstating the impacts of the proposed project on GHG emissions could lead to misallocation of resources in seeking solutions to GHG emissions and climate change problems. For example, a more effective approach to reducing GHG emissions to assist with resolving climate change issues could include State or federal regulations on fuel formulation, as California is attempting to do with the Low Carbon Fuel Standard.

Analysis

BAAQMD has jurisdiction over much of the nine-county Bay Area. The current BAAQMD CEQA Guidelines do not provide any significance thresholds for GHG emissions. In December 2009, the BAAQMD circulated an updated draft guidance document which is to be considered for adoption in April 2010. Proposed new significance thresholds include quantitative threshold of significance for GHG emissions. The proposed updated guidance provides that a development project, other than a stationary source, would have a significant cumulative impact unless:

- The project can be shown to be in compliance with a qualified Climate Action Plan;
- Project emissions of CO<sub>2</sub> equivalent GHGs (CO<sub>2</sub>e) are less than 1,100 metric tons per year; or
- Project emissions of CO<sub>2</sub> equivalent GHGs are less than 4.6 metric tons per year per service population (residents plus employees).

However, the Draft BAAQMD CEQA Guidelines contain screening thresholds for GHG emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration. In addition, the screening criteria in this section do not account for project design features, attributes, or local development requirements that could also result in lower emissions. For projects that are mixed-use, infill, and/or proximate to transit service and local services, emissions would be less than the greenfield type project that these screening criteria are based on.

The screening criteria developed for greenhouse gases were derived using the default emission assumptions in URBEMIS and using off-model GHG estimates for indirect emissions from electrical generation and water conveyance. Projects below the applicable screening criteria shown in Table 3-1 of the Guidelines would not exceed the 1,100 MT of CO<sub>2</sub>e/yr GHG threshold of significance for projects other than stationary sources. The relevant screening criteria from Table 3-1 are as follows:

	<b><u>Operational Criteria Pollutant Screening Size</u></b>	<b><u>Operational GHG Screening Size</u></b>
<u>Condo/townhouse, general</u>	<u>451 du (ROG)</u>	<u>78 du</u>
<u>Quality Restaurant</u>	<u>47 ksf (NOX)</u>	<u>9 ksf</u>

Given that the Creekside Terrace project would consist of seven (7) dwelling units and approximately 7,200 sf of ground-floor retail uses, the project would not exceed the District’s draft GHG emissions threshold.

Furthermore, as shown in Table 4, potential greenhouse gas emissions for both construction and operation of the proposed project have been calculated. The below numbers are considered to be very conservative as they do not take into account the greenhouse gas emissions of the existing structures that will be removed. In addition to the difficulty in following the CEQA requirements described above, to accurately account for greenhouse gas emissions attributable to the project, it would be necessary to differentiate between new sources that otherwise would not exist but for the project, and existing sources that have simply relocated to the project area (presumably from anyplace in the world).

<b><u>Table 4</u></b> <b><u>Short-Term Construction and Operational Greenhouse Gas Emissions for Proposed Project</u></b>	
<b><u>Source</u></b>	<b><u>Maximum CO<sub>2</sub> Equivalent (Tons/Year)</u></b>
<u>Construction Equipment Exhaust</u>	<u>98.80</u>
<u>Operational (Motor Vehicles)</u>	<u>927.41</u>
<b><u>Notes:</u></b> <u>Equipment Exhaust: Emissions were calculated using the URBEMIS2007 (Version 9.2.4) computer program.</u> <u>Construction Waste: Emissions were calculated based on data obtained from the USEPA for construction generated debris and waste (USEPA 1998).</u>	

Greenhouse Gas Emission Strategies of the Creekside Terrace Project

In March 2008, the California Attorney General issued a paper for use by local agencies in carrying out their duties under CEQA as they relate to global warming. Included were examples of various measures that may reduce the emissions of individual projects that result in global warming. As noted in the paper, each of the measures should not be considered in isolation, but as part of a larger set of measures, that together, would help reduce greenhouse gas emissions and the effects of global warming. In June 2008, the Governor’s Office of Planning and Research released a technical advisory on addressing climate change in CEQA documents. The advisory included examples of greenhouse gas reduction measures, but did not require the implementation of any particular measure. The measures included in the technical advisory are substantially similar to the measures proposed by the Attorney General.

Table 5 lists the measures from the California Attorney General’s office that are applicable to the proposed Creekside Terrace project and indicates the whether, and how, the project would conform to the measures.

<b><u>Table 5</u></b> <b><u>Greenhouse Gas Emissions Measures – Creekside Terrace Project</u></b>	
<b><u>Office of the California Attorney General</u></b> <b><u>Methods to Offset or Reduce Global Warming</u></b> <b><u>Impacts</u></b>	<b><u>Creekside Terrace Compliance</u></b>
<b><u>Energy Efficiency</u></b>	
<u>Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.</u>	<u>The project will be designed for energy efficiency.</u>
<u>Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.</u>	<u>The project will include the installation of efficient lighting and lighting control systems.</u>
<u>Install light colored “cool” roofs, cool pavements, and strategically placed shade trees.</u>	<u>Strategically placed shade trees will be utilized. Cool pavements and cool roofs will be included pending appropriateness of design and feasibility.</u>
<u>Install energy efficient heating and cooling systems, appliances and equipment, and control systems.</u>	<u>The project will include the installation of energy-efficient heating and cooling systems, appliances, equipment, and control systems to the maximum extent feasible.</u>
<u>Limit the hours of operation of outdoor lighting.</u>	<u>Sufficient lighting for safety purposes will be required</u>

	<u>consistent with tenant hours. However, phased or zoned lighting reductions will be utilized in areas with reduced tenant hours.</u>
<b><u>Renewable Energy</u></b>	
<u>Install solar and wind power systems, solar and tankless hot water heaters, and energy-efficient heating ventilation and air conditioning. Educate consumers about existing incentives.</u>	<u>Energy-efficient heating and ventilation will be utilized. Solar power systems will be considered. Solar and tankless water heaters will be considered and utilized where feasible.</u>
<b><u>Water Conservation and Efficiency</u></b>	
<u>Create water-efficient landscapes.</u>	<u>Water-efficient landscaping design and material will be utilized.</u>
<u>Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.</u>	<u>Water-efficient irrigation systems and devices will be utilized.</u>
<u>Design buildings to be water-efficient. Install water-efficient fixtures and appliances.</u>	<u>Water-efficient fixtures and appliances will be utilized.</u>
<u>Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.</u>	<u>Watering methods will be utilized that control runoff and restrict water to non-vegetated surfaces.</u>
<u>Restrict the use of water for cleaning outdoor surfaces and vehicles.</u>	<u>Restriction on the use of water for cleaning outdoor surfaces and vehicles will be implemented, through CC&amp;Rs, consistent with any specific policies set forth by CCWD.</u>
<b><u>Solid Waste Measures</u></b>	
<u>Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).</u>	<u>Reuse and recycling of construction waste will be implemented to the maximum extent feasible.</u>
<u>Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.</u>	<u>Separate waste and recycling receptacles will be utilized on-site. Interior and exterior storage areas for recyclables will be located within the project site.</u>
<b><u>Land Use Measures</u></b>	
<u>Include mixed-use, infill, and higher density in development projects to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods.</u>	<u>The proposed project is an infill development. In addition, the project would develop the site at a higher density than the existing conditions. The project would living and entertainment options to local residents and workers, which could result in a reduction of vehicle trips.</u>
<u>Incorporate public transit into project design.</u>	<u>The project is located in an area served by public transit.</u>
<u>Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.</u>	<u>The project includes the parcel west of Mitchell Creek, which is currently in an open space condition. As part of the project, a conservation easement will be recorded across this parcel so that it will be maintained in an open space condition in perpetuity.</u>
<u>Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.</u>	<u>Pedestrian paths/facilities are located adjacent to project on existing street network.</u>
<b><u>Transportation and Motor Vehicles</u></b>	
<u>Limit idling time for commercial vehicles, including delivery and construction vehicles.</u>	<u>State law regulates idling of commercial vehicles and prohibits idling for longer than five consecutive minutes or five total minutes in one hour.</u>
<u>Use low or zero-emission vehicles, including construction vehicles.</u>	<u>Low or zero-emission vehicles will be utilized to the maximum extent feasible.</u>
<u>Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).</u>	<u>The project applicant will work with the City to determine the appropriate number and location of electric vehicle charging facilities.</u>
<u>Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.</u>	<u>The project is a relatively small development that would not incorporate improvements that would alter the existing street system.</u>
<u>Incorporate bicycle-friendly intersections into street design.</u>	<u>The project entrance would have clear lines of sight for both bicyclists and motorists.</u>

For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, e.g., locked bicycle storage or covered or indoor bicycle parking.

The project will provide adequate bicycle rack parking near building entrances.

The proposed Creekside Terrace project is surrounded by existing development, and is considered to be an infill project. As identified above in Table 5, infill development is one of the greenhouse gas reduction strategies advocated by the Attorney General. Infill developments can reduce commutes, provide amenities closer to existing residences, and can reduce development pressure on undeveloped lands at the periphery of cities. Therefore, the proposed Creekside Terrace project is appropriately located and designed to minimize the emissions of greenhouse gases and thereby reduce the project's contribution to global climate change to a *less-than-significant* level.

## 5. Biological Resources

Under Question (a) of the Biological Resources section, on page 36 of the IES/MND, the text has been revised to clarify that the conclusions regarding Question (a) are based on the Biological Resources Assessment prepared for the project site by Environmental Collaborative. In addition, the second paragraph under Question (a) has been revised to clarify that the project includes an infiltration planter on APN 119-050-008, which would otherwise remain undeveloped with an overlying conservation easement. Because the Creekside Terrace IES/MND evaluates the 800 sf infiltration planter, and includes minor revisions to previously required protection measures to ensure that its construction and operation would not impact downslope Mitchell Creek, this is not considered significant new information.

### Discussion

The following discussion is based upon the Biological Resource Assessment prepared for the project site by Environmental Collaborative (see Appendix A to this IES/MND).

Construction of the proposed project would require demolition of the existing buildings, removal of the ornamental landscape species, and grading on the developed portion of the site as well as the construction of an 800 square foot infiltration planter on APN 119-050-008, which would otherwise remain undeveloped with an overlying conservation easement. The proposed bio-retention facility would be located approximately 40 feet from the nearest edge of Mitchell Creek. In general, this is not expected to result in any adverse impacts on special-status species. Essential habitat for listed species known from the Mt. Diablo vicinity, such as Alameda whipsnake, California tiger salamander, western pond turtle, and California red-legged frog, is absent on the site. Similarly, no occurrences of special-status plant species have been reported from the site or immediate vicinity, and no populations are believed to occur on the site.

## 6. Cultural Resources

Under Question (a) of the Cultural Resources section, fourth paragraph, on page 43 of the IES/MND, the text has been revised to clarify that the project includes an infiltration planter on APN 119-050-008, which would otherwise remain undeveloped with an overlying conservation easement. The construction of the 800 sf infiltration planter would not impact any historic resources, as none exist on APN 119-050-008; therefore, the less-than-significant conclusion for Question (a) remains valid.

The parcel to the west (APN 119-050-008) is currently unimproved and anticipated to be merged with the other two parcels to be a part of the site of this proposed project. A conservation easement would be recorded across the parcel so that it would remain undeveloped with the exception of the 800 square foot infiltration planter associated with the proposed project. It is important to note that none of the project structures are listed in the *Clayton Heritage Preservation Task Force Report* as recommended historic sites. As the existing on-site structures are not listed as historic resources, a *less-than-significant* impact would result.

## 9. Hydrology

Under Questions (a) and (b) of the Hydrology section, on pages 53 and 54 of the IES/MND, the text has been revised to reflect the newly proposed drainage system design for the project, as follows:

In addition, the San Francisco Bay Regional Water Quality Control Board (RWQCB) issued an Order requiring all municipalities within Contra Costa County (and the County itself) to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide National Pollution Discharge Elimination System (NPDES) permit. Known as the “C.3 Standards,” new development or redevelopment projects that disturb one or more acres of land area must contain and treat stormwater runoff from the site. Formerly, the threshold was five or more acres of land disturbance. Enhanced Best Management Practices (BMP) to protect stormwater runoff from development sites are also required under the C.3 Standards since February 15, 2005, for projects creating 1 acre of new or redevelopment impervious area. Beginning August 2006, the threshold decreased to 10,000 square feet impervious area. The project would create and/or improve approximately 15,481~~614~~ square feet of impervious surface area, and would therefore be subject to C.3 requirements. As a result, a Stormwater Control Plan (see Appendix B) has been prepared for the project to address how the project would satisfy the C.3 requirements: which have the following design objectives:

- Design the site to minimize imperviousness, detain runoff, and infiltrate runoff where feasible
- Cover or control sources of stormwater pollutants
- Treat runoff prior to discharge from the site
- Ensure runoff does not exceed pre-project peaks and durations
- Maintain treatment and flow-control facilities

As indicated in the Plan, infiltration planters will be incorporated into the site design in order to meet C.3 requirements and minimize the quantity of pollutants that enter the storm drainage system. Although the existing soils do not meet the infiltration rate, material will be imported to be placed in the infiltration planters. A typical infiltration planter presented in the Contra Costa County Stormwater C.3 Guidebook removes pollutants through a combination of overland flow through vegetation, surface detention, and filtration through the soil. For the project, a perforated underdrain pipe will be used under planters instead of infiltration of runoff into native soil because the underlying soil at the site has a slow infiltration rate of 0.06 to 0.20 inches per hour.

The California Stormwater Quality Association has documented that the most efficient and economical best management practices are directed toward small, frequent events that over time produce more total runoff than the larger, infrequent storms used for design of drainage and flood control facilities. The Contra Costa Clean Water Program Stormwater C.3 Guidebook recommends capture and infiltration or treatment of the flow produced by runoff resulting from a rain equivalent to 0.2 inches per hour.

The Stormwater C.3 Guidebook recommends a 0.05 sizing factor for infiltration planters based on amount of impervious rainfall. The impervious areas of the site, including roofs, parking areas, streets and driveways have been divided into distinct drainage areas as shown on the Storm Water Control Plan Exhibit in the Plan (see Appendix B). Runoff from each of these impervious areas is managed by routing storm water to the infiltration planters to treat the runoff. The runoff from the building roofs and private paved areas will be discharged to ~~planters which direct runoff to infiltration planters located as shown on the Storm Water Treatment Plan Exhibit. Four planters will be constructed on site, including a 199 square foot above-grade planter and a 55 square foot at-grade planter at the southeast corner of the proposed mixed-use building, a 241 square foot at-grade planter along the Oak Street frontage, and a sump located just north of the proposed trash enclosure for the project, and the runoff would then be pumped to an infiltration planter located on the City-owned parcel west of the creek. While this infiltration planter will have a minimum 18-inch depth of sandy loam with a minimum infiltration rate of 5 inches per hour, and a 6-inch perforated underdrain pipe, the design also includes an overflow catch basin connected to an underground overflow pipe, that would, in certain storm events, discharge excess runoff overland through vegetated/grassy swales prior to entering downstream Mitchell Creek. In contrast, under current site conditions, after any on-site infiltration, stormwater that does not further penetrate into the site soils eventually gets collected in the City's storm drain system and conveyed into Mitchell Creek without any further treatment.~~

An additional 343 60 square foot at-grade planter would be located north of the proposed mixed-use building and would collect runoff from Drainage Management Area (DMA) 8, as shown on the Storm Water Control Plan (see Appendix B). There currently exists a public storm drain pipe in the Oak Street right-of-way; however, the shallow depth of the system precludes it from being utilized for the project. The project's system will connect to this system at three locations.

Without the incorporation of applicable Best Management Practices, such as listed in the Stormwater Control Plan prepared for the project, the project would have a *potentially significant* impact on receiving water quality.

The above changes to the existing discussion under Questions (a) and (b) do not affect the adequacy of the previous environmental analysis, as the previously required mitigation measures remain adequate to ensure that the project would ultimately have less-than-significant impacts to water quality.

Under Question (c) of the Hydrology section, on page 55 of the IES/MND, the text has been revised to include another reason why the project would not impact groundwater recharge – a conclusion which is already supported in the existing analysis.

#### Discussion

The Contra Costa Water District (CCWD) provides domestic water service to Clayton. The major sources of water are the Sacramento River and the Sacramento River via the Contra Costa Water District Canal, not pumped groundwater. With the construction of a two-story mixed use building the project would result in a net increase in impervious surfaces; however, the surface area would not be large enough to significantly affect groundwater recharge, and the existing site soils are largely impermeable. Therefore, the project would have a *less-than-significant* impact to groundwater resource supply and/or recharge.

Under Questions (d-f) of the Hydrology section, on pages 55 and 56 of the IES/MND, the text has been revised to reflect the newly proposed drainage system design for the project, as follows:

#### Discussion (d., e., and f.)

The proposed project includes the construction of seven residential units above approximately ~~7,000~~200 sq ft of retail on a site that currently contains three structures that will be removed. In total the project would create or improve approximately ~~15,481~~614 sq ft of impervious surfaces on the site. The project includes two infiltration planters -- the main planter is located on the west side of Mitchell Creek and is approximately 800 square feet. This infiltration planter would receive the majority of the site's runoff. The second infiltration planter is located north and south of the proposed building that and would filter stormwater and drain below to pipes connected to the existing 12-inch storm drain pipe located in Oak Street to accommodate the 10-year flood. A third infiltration planter in the northern portion of the site would also connect to the existing drain line in Oak Street. The Oak Street drain would have sufficient capacity to serve the proposed project drainage demands from DMA 8. However, since other details have not been provided regarding the proposed storm drain system, such as confirming the party(ies) responsible for the long-term maintenance of the system, a *potentially significant* impact would result.

The above changes to the existing discussion under Questions (d-f) do not affect the adequacy of the previous environmental analysis, as the previously required

mitigation measures remain adequate to ensure that the project would ultimately have less-than-significant impacts regarding existing drainage patterns and storm water system capacity.

Page 58 of the IES/MND has been revised to change the number of the Exhibit due to the newly included Exhibit 5, Vesting Tentative Map.

## 10. Land Use

Under Question (b) of the Land Use section, on page 61 of the IES/MND, the text has been revised to clarify that the project includes an infiltration planter on APN 119-050-008, which would otherwise remain undeveloped with an overlying conservation easement.

## 12. Noise

Page 63 of this section of the IES/MND has been revised to reflect the small increase in ground floor retail square footage.

## 14. Public Services

Under Question (d) of the Public Services section, on page 69 of the IES/MND, the text has been revised to clarify that the project includes an infiltration planter on APN 119-050-008, which would otherwise remain undeveloped with an overlying conservation easement.

Under Question (f), on page 70 of the IES/MND the text has been revised as follows to reflect the fact that the project applicant has received a letter from the waste service provider, expressing general support for the proposed design of the project's trash receptacle area.

The project developer must also submit a performance deposit to ensure compliance with the waste management plan and cover staff costs related to the review, monitoring and enforcement of the plan. The project applicant must also provide appropriate space for permanent residential and commercial recycling receptacles, which the applicant has proposed to locate within the guest parking area along High Street. In a letter to the City from Allied Waste Management, dated April 14, 2010, the Clayton Area Route Supervisor stated his opinion that the enclosures depicted on the plans appear to be adequate to service the waste, recycling and green requirements for the proposed project.

On the basis of the *Municipal Code* requirements for waste management plans and preliminary feedback from the waste provider that the project has been

adequately designed to accommodate service vehicles, implementation of the proposed project would result in a *less-than-significant* impact.

## 15. Transportation and Circulation

Under Questions (a) and (b) of the Transportation and Circulation section, on pages 71-73 of the IES/MND, the text has been revised to reflect the small increase in ground floor retail square footage. As can be seen, increasing the amount of ground floor retail space by approximately 200 sf would have negligible effects on the number of trips generated by the proposed project.

### *Project Conditions*

Trip generation rates of 9.57 trips for single-family uses and 42.9 trips per 1,000 sq ft of retail uses were used to calculate trip generation. As shown in **Table 67**, the project would generate an additional 36876 trips per day or approximately 334 trips during the peak hour period. The number of trips is well below the established threshold where a detailed traffic analysis would be required. Generally, an individual signalized intersection would require a minimum of 50 trips per hour before the differences in traffic capacity need to be measured. For this project, the trips would be distributed among several roadways. As a result, the project would not create a substantial increase in the number of vehicle trips to a single roadway. The addition of 36876 vehicle trips would not exceed the maximum daily vehicle capacity for Oak Street or High Street. It should be noted that the estimated trips generated should be considered higher than likely because many of the potential trips to the retail portion of the project could come from existing trips in the area. Normally a 34 percent reduction to the retail trips would be used to account for “pass-by” trips. However, to provide a conservative review of the project trips and to account for other potential tenants, no pass-by reductions were used. As the proposed project would add only 334 trips to the peak hour period, the peak hour trips generated would not result in the degradation of the operations of nearby intersections to unacceptable levels.

Land Use	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
General Retail (Trip rate per 1,000 sq ft)	42.9	0.63	0.4	1.03	1.8	1.95	3.75
Trip Generation from project (7,000200 sq ft)	3049	45	3	7	13	14	267
Housing – Market Rate (Trip rate per dwelling unit)	9.57	0.19	0.56	0.75	0.64	0.037	1.01
Trip Generation from 7 units	67	1	4	5	4	3	7
<b>Total Project Trips</b>	<b>36876</b>	<b>67</b>	<b>7</b>	<b>12</b>	<b>17</b>	<b>16</b>	<b>334</b>

Under Question (e) of the Transportation and Circulation section, on pages 75-77 of the IES/MND, the text has been revised, in part based upon Comment 2-7 (see Appendix F to the Creekside Terrace IES/MND), to reflect the small increase in ground floor retail square footage, make minor corrections to the parking discussion, and clarify that the applicant, in compliance with Municipal Code Section 17.37.070, would pay in-lieu parking fees, which would ensure that adequate funds are being collected to provide sufficient long-term parking for development in the Town Center area. Therefore, the project would have a less-than-significant impact on parking, as originally determined in the IES/MND.

Discussion

The City of Clayton Zoning Code requires two off-street parking spaces for each residential unit and one space for each 400 square feet of retail space (without a Town Center Parking waiver) as specified in the Town Center Parking Study. **Table 79** shows the required parking for the project according to City standards and **Table 810** shows the off-street parking proposed as part of the project. As shown **Table 79**, the project would require 14 off-street spaces for the upper level residential units and approximately 1828 parking spaces for the proposed ground floor retail space. It should be noted that a 75 percent waiver of the City parking standards for the ground floor space is permitted as part of the City’s plan to encourage retail uses in the Town Center area.

Development	Size	Trip Rate	Parking Spaces
General Retail (1 <sup>st</sup> Floor)	7,000 <del>000</del> <u>200</u> sq ft	<u>2.5 per ksf 1 space for every 250 sf</u>	<u>Approximately 1828</u>
Town Center Parking Waiver (75% reduction)			- <u>421</u>
Residential	7 units	2 per unit*	14
<b>Total</b>			<b><u>1821 (with waiver) 342 (without waiver)</u></b>
* Note: This includes 1.5 spaces per unit plus 0.5 guest spaces per unit.			

Project Component	Parking Spaces
General Retail (1 <sup>st</sup> Floor)	0
Residential (Parking Garages for Residents)	14
Residential (Guest Parking Spaces)	7
<b>Total</b>	<b>21</b>

For comparison, a conservative estimate of the parking demand for the project using data from the ITE Parking Generation Manual was made. As mentioned previously, the project includes 7,000~~000~~200 square feet of retail space along with seven residential units. The parking demand estimates in **Table 810** are based on the “General Retail/Shopping Center Land Use” (Category 820) for the first floor, and the residential rate for the seven dwelling units. The calculation is

shown in **Table 911**. These parking calculations result in a parking demand for 367 spaces.

<b>Table 911</b>			
<b>Maximum Parking Demand for the Project</b>			
<b>Development</b>	<b>Size</b>	<b>Rate per 1,000 sq ft</b>	<b>Parking Spaces</b>
General Retail (1 <sup>st</sup> Floor)	7,000 <u>200</u> sq ft	3.23	<u>223</u>
Residential	7 units	2 per unit	14
<b>Total</b>			<b><u>367</u></b>

Due to the location of the project within the Town Center area and effects of shared parking, the parking demand for the project is anticipated to be less than the maximum. For another comparison, the parking from a small mixed-use project of similar size could use a typical parking generation rate of 2.8 spaces per 1,000 sq ft for retail. The City of Walnut Creek requires 3.3 spaces per 1,000 sq ft for all uses in the downtown area. For residential uses about 1.3 spaces per unit is what is normally required for downtown developments. If the calculation assumes a more urban/downtown setting then the estimated demand would be about 29 parking spaces for the project.

~~The 21 off-street parking spaces being provided for the project's residential units are anticipated to meet the City's parking requirements. However, u~~Using the ITE Parking Generation Manual rates, the project's parking space total is anticipated to fall short of the demand by 156 spaces. Based upon the most comparable Walnut Creek parking generation rates, the proposed project would result in an eight parking space deficit. While the Municipal Code does allow commingling of commercial and residential parking spaces (see Section 17.37.060, Reciprocal Parking Facilities), it is impractical to assume that the seven parking spaces on the proposed driveway pads for the project's residential units could be used to support the commercial use. Consequently, the project would be subject to payment of in-lieu parking fees (see Section 17.37.070, In-Lieu Parking Fees). However, it should be noted that Additional parking demand could be readily accommodated by the is available on-street and public parking in the Town Center area without increasing parking occupancy rates more than three percent (based on the existing supply). At build-out the Town Center area is anticipated to have up to 1,100 on-street and public parking spaces available. Although the use of on-street parking would increase on the blocks closest to the project, the vehicles from the proposed project would increase the overall downtown parking occupancy levels by less than 2 percent.

On-street parking conditions

The City of Clayton currently has about 218 on-street parking spaces in the downtown area. About 110 of these spaces are located within two blocks of the site. The occupancy of the downtown spaces is approximately 65 percent during active times and 80 percent during the busiest weekend evenings. The *Town Center Parking Study* (SAS Planning and Consulting, May 2006) contains a complete inventory.

### Conclusion

The proposed project would generate a demand for 367 parking spaces and provide 21 parking spaces. ~~Additional off-site parking spaces in the surrounding downtown area are anticipated to satisfy the remaining demand. Sufficient on-site and on-street parking could meet the proposed project parking demands. However, the project is required, per Municipal Code Section 17.37.070, to pay in-lieu parking fees, which would ensure that adequate funds are being collected to provide sufficient long-term parking for development in the Town Center area.~~ Therefore, ~~as the proposed project,~~ the project would have a *less-than-significant* impact ~~would result on parking.~~

Under Question (f) of this section, on page 78 of the IES/MND, the text has been revised to reflect the small increase in ground floor retail square footage.

## **16. Mandatory Findings of Significance**

Under Question (b) of this section, on page 82 of the IES/MND, the text has been revised to reflect the small increase in ground floor retail square footage.

# **Appendix H**

## **Mitigation Monitoring Plan**

City of Clayton – Creekside Terrace Project  
Mitigation Monitoring Program  
ENV 01-08  
May 25, 2010

The California Environmental Quality Act (CEQA) and CEQA Guidelines require Lead Agencies to adopt a program for monitoring the mitigation measures required to avoid significant environmental impacts of a project. The monitoring program ensures that mitigation measures imposed by the City are completed at the appropriate time in the development process.

The mitigation measures identified in the Initial Environmental Study / Negative Declaration for the Creekside Terrace project are listed below along with the party responsible for implementation; the party responsible for monitoring implementation of the mitigation measure; the milestones for implementation and monitoring; and a sign off that the mitigation measure has been implemented.

**MITIGATION MONITORING REPORT  
CITY OF CLAYTON – CREEKSIDE TERRACE PROJECT**

<b>Mitigation Measure</b>	<b>Implementing Parties</b>	<b>Monitoring Parties</b>	<b>Milestones for Monitoring</b>	<b>Verification</b>
<p><b>Mitigation Measure 1 – Air Quality</b> The following measures shall be adhered to during all construction phases of the Project:</p> <ul style="list-style-type: none"> <li>• Earthmoving or other dust-producing activities shall be suspended during periods of high winds, (i.e., instantaneous wind gusts of 25 mph or greater);</li> <li>• All exposed or disturbed soil surfaces shall be watered at least twice daily on any day of high winds or when construction activities occur, including weekends and holidays;</li> <li>• Stockpiles of debris, soil, sand or other materials that can be blown by the wind, shall be watered with a soil stabilizer or covered;</li> <li>• Construction areas, adjacent streets, and routes for construction traffic shall be swept of all mud and debris by a water sweeper on a daily basis (minimum) on any day when construction activities occur, including weekends and holidays;</li> <li>• All trucks hauling soil, sand, or other loose materials shall be covered or maintain at least two feet of freeboard;</li> <li>• A compliance officer (City Engineer unless otherwise identified as part of the grading permit process), shall be responsible for implementation and monitoring of the</li> </ul>	Project Contractor	Clayton City Engineer	During all construction phases of the Project	

**MITIGATION MONITORING REPORT  
CITY OF CLAYTON – CREEKSIDE TERRACE PROJECT**

Mitigation Measure	Implementing Parties	Monitoring Parties	Milestones for Monitoring	Verification
above requirements.				
<p><b>Mitigation Measure 2 –Biological Resources</b> Pre-construction nesting surveys for raptors and migratory birds protected under the federal Migratory Bird Treaty Act shall be conducted if initial grading and building demolition is to be conducted during the months of March through August. A qualified biologist shall conduct the surveys no more than 14 days prior to initiation of grading, building demolition, or tree removal. If any of these species are found within the construction area after April of the construction year, grading and construction in the area shall either stop or continue only after the nests are protected by an adequate setback approved by a qualified biologist. If permanent avoidance of nests is not feasible, impacts on raptor and migratory bird nests shall be minimized by avoiding disturbances to the nest location during the nesting season unless a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from those nests are foraging independently and capable of independent survival at an earlier date. No preconstruction surveys are required if grading, building demolition, or tree removal occurs outside the nesting season (September through February).</p>	Project Developer	Community Development Director  Qualified biologist	If initial grading and building demolition is to be conducted during the months of March through August, preconstruction survey required no more than 14 days prior to initiation of grading, building demolition, or tree removal.	
<p><b>Mitigation Measure 3 –Biological Resources</b> A preconstruction survey shall be conducted by a qualified biologist within 7-days of construction to confirm absence of any fish, amphibian, or reptile species of concern along the project reach</p>	Project Developer	Community Development Director  Qualified biologist	Within 7 days of construction, preconstruction survey shall be completed.	

**MITIGATION MONITORING REPORT  
CITY OF CLAYTON – CREEKSIDE TERRACE PROJECT**

Mitigation Measure	Implementing Parties	Monitoring Parties	Milestones for Monitoring	Verification
<p>of Mitchell Creek. In the remote instance that listed California red-legged frog or steelhead individuals are encountered, the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries) shall be consulted to determine appropriate avoidance measures prior to initiation of any construction activities. Any western pond turtle encountered shall be relocated to secure pool habitat selected by the qualified biologist.</p>		<p>USFWS and NOAA, only if California red-legged frog or steelhead detected, respectively.</p>		
<p><b>Mitigation Measure 4 – Biological Resources</b> A qualified biologist shall be retained to oversee construction and ensure that no inadvertent take of California red-legged frog, steelhead, or western pond turtle occurs as a result of short-term disturbance near Mitchell Creek. This shall include the following provisions:</p> <ul style="list-style-type: none"> <li>a) Prior to any grading or grubbing of the site, the qualified biologist shall conduct a preconstruction survey to confirm absence of any California red-legged frog, steelhead, or western pond turtle on the site, as called for in Mitigation Measure 3. A report summarizing the survey results shall be submitted to the Community Development Director.</li> <li>b) Silt fencing shall be installed at the west edge of the construction zone and to the east and west of the top of bank, buried a minimum of six inches and extending a minimum of two feet above grade, to serve</li> </ul>	<p>Project Developer</p>	<p>Community Development Director</p> <p>Qualified biologist</p> <p>USFWS, if applicable per standards in MM 4(d-d)</p>	<p>Prior to any grading or grubbing of the site, preconstruction survey shall be conducted (MM 4(a))</p> <p>and</p> <p>During the construction phase of the project (MM 4(b-e))</p>	

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<p>as a barrier to keep ground mobile wildlife dispersing along the creek corridor from entering the construction zone. The fencing shall remain in place during the entire construction period.</p> <p>c) Construction workers shall be trained by the qualified biologist regarding the potential presence of California red-legged frog and western pond turtle, that these species are to be avoided, that the foreman must be notified if they are seen, and that construction shall be halted until appropriate measures have been taken. For California red-legged frog, work shall be halted until authorization to proceed is obtained from the USFWS. Harassment of California red-legged frog is a violation of federal law.</p> <p>d) During the construction phase of the project, a qualified biologist or an on-site monitor (such as the construction foreman trained by the qualified biologist) shall check the site in the morning and in the evening of construction activities for the presence of California red-legged frog and western pond turtle. This includes checking holes, under vehicles and under boards left on the ground. If any California red-legged frog are found, construction shall be halted, and the monitor shall immediately notify the qualified biologist in charge and the USFWS. Construction shall not proceed</p>				

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<p>until adequate measures are taken to prevent dispersal of any individuals into the construction zone, as directed by the USFWS. Subsequent recommendations made by the USFWS shall be followed.</p> <p>e) No one shall handle or otherwise harass any individual California red-legged frogs encountered during construction, with the exception of a Service-approved biologist. The qualified biologist in charge shall train the on-site monitor in how to identify California red-legged frog.</p>				
<p><b>Mitigation Measures 5(a) and 5(b) – Biological Resources</b></p> <p>5(a) The Tree Preservation Guidelines called for in the Tree Report (HortScience, 2008) shall be followed to preserve native oaks and other noteworthy trees on the site. Of particular concern is the large valley oak (Tree #272), which must be heavily pruned to prevent toppling and reduce the risk to humans and property. This tree shall be retained, and recommended pruning shall be performed under the supervision of a certified arborist.</p> <p>5(b) The project shall conform with the City of Clayton Tree Protection Ordinance (Chapter 15.70 of the Zoning Code), through adherence to the Tree Preservation Guidelines called for in the Tree Report and provisions for replacement plantings, which will be incorporated into the Final Landscape Plan.</p>	Project Developer	Community Development Director  Certified arborist	During the construction phase of the project	

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<p><b>Mitigation Measure 6 – Cultural Resources</b> Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities, an archaeological monitor shall be retained by the applicant and approved by the City to train the construction grading crew prior to commencement of earth-grading activity in regard to the types of artifacts, rock, bone, or shell that they are likely to find, and when work shall be stopped for further evaluation. One trained crew member shall be on-site during all earth moving activities, with the assigned responsibility of “monitor.” Should archeological, historical, or Native American artifacts or remains be discovered during construction of the Project, work in the vicinity of the find shall stop immediately until the resource(s) are evaluated and the appropriate means of curation is determined. Project personnel shall not collect or alter cultural resources. Identified cultural resources shall be recorded on forms DPR 422 (archeological sites) and/or DPR 523 (historic resources).</p>	Project Contractor	Community Development Director	Prior to commencement of construction-related activities for the project including, but not limited to, grading, staging of materials, or earthmoving activities	
<p><b>Mitigation Measure 7 – Geology and Soils</b> Prior to the approval of building foundation plans, the plans shall indicate the anchoring of project structures to the bedrock or the construction of a subterranean retaining wall, for review and approval by the project soils engineer and the County Building Department.</p>	Project Contractor	Project Soils Engineer  County Building Department	Prior to the approval of building foundation plans	
<p><b>Mitigation Measure 8 – Geology and Soils</b> Prior to issuance of a grading permit, the Developer</p>	Project Developer	City Engineer	Prior to issuance of a grading permit and during	

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<p>shall submit, for the review and approval by the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Hydro-seeding;</li> <li>• Placement of erosion control measures within drainageways and ahead of drop inlets;</li> <li>• The temporary lining (during construction activities) of drop inlets with “filter fabric”;</li> <li>• The placement of straw wattles along slope contours;</li> <li>• Use of a designated equipment and vehicle “wash-out” location;</li> <li>• Use of siltation fences;</li> <li>• Use of on-site rock/gravel road at construction access points; and</li> <li>• Use of sediment basins and dust palliatives.</li> </ul>			grading operations	
<p><b>Mitigation Measure 9 – Hazards and Hazardous Materials</b> Prior to issuance of a demolition permit by the City for any on-site structures, the Developer shall provide a site assessment, which determines whether any structures to be demolished contain asbestos. If any structures contain these materials or any other hazardous materials, the Developer shall submit an abatement plan consistent with local, state, and federal standards, subject to approval of the Contra Costa County Building</p>	Project Developer	<p>Contra Costa County Building Inspection Department</p> <p>Contra Costa County Environmental Health Department</p>	Prior to issuance of a demolition permit by the City for any on-site structures	

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<p>Inspection Department. In addition, the site assessment shall include a site inspection and records review to determine the historic uses of the property, and whether any hazardous substances release(s) have occurred. If the assessment detects the presence of contaminated soils, a remediation plan consistent with local, state, and federal standards, shall be submitted for approval by the Contra Costa County Environmental Health Department. The abatement and remediation plan(s) shall identify the necessary measures that the applicant must comply with to fully remove any existing on-site hazards to the satisfaction of the Contra Costa County Environmental Health Department.</p>				
<p><b>Mitigation Measure 10 – Hydrology</b> Prior to the issuance of building permits, the developer shall prepare a Storm Water Control Plan that includes both construction stage and permanent storm water pollution prevention practices to be submitted to the City Engineer for review.</p>	Project Developer	City Engineer	Prior to the issuance of building permits	
<p><b>Mitigation Measure 11 – Hydrology</b> All project contractors shall conform to the requirements of the “Best Management Practices for Construction Sites” required by the City, including detention and/or filter materials to preclude an increase in water quantity and quality impacts from debris and sediments entering the stormwater system over “pre-development” conditions.” The BMPs shall be included in the construction contracts for the review and approval by the City Engineer.</p>	Project Contractor	City Engineer	Prior to commencement of construction-related activities for the project and during construction	

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<p><b>Mitigation Measure 12 – Hydrology</b>            The project applicant shall commit the future property owners to fully fund the construction and perpetual maintenance of the storm drain system, including monitoring of the storm drain facilities. The funding mechanism shall be acceptable to the City and shall address costs for capital replacement, inflation, and administration. This shall include the preparation of an Operation and Maintenance Plan (OMP) consistent with the model proposed by the Contra Costa Clean Water Program. Any related review or administrative fees resulting from the OMP shall be the responsibility of the property owner. The OMP will “run with the land” and be enforceable on subsequent property owners of all residential and commercial lots. Maintenance activities may include but not be limited to:</p> <ul style="list-style-type: none"> <li>• Inspect planters for channels, exposure of soils, or other evidence of erosion. Clear any obstructions and remove any accumulation of sediment. Soils and plantings must be maintained.</li> <li>• Inspect planters regularly and after storms.</li> <li>• Observe soil at the bottom of the planters or filter for uniform percolation throughout. If portions of the planter or filter do not drain within 48 hours after the end of a storm, the soil should be tilled and replanted. Remove any debris or accumulations of sediment.</li> <li>• Examine the vegetation to insure that it is</li> </ul>	<p>Project Developer</p>	<p>Community Development Director and City Engineer</p>	<p>Prior to issuance of a grading permit</p>	

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<p>healthy and dense enough to provide filtering and to protect soils from erosion. Replenish mulch as necessary, remove fallen leaves and debris, prune large shrubs or trees and mow turf areas. Confirm that irrigation is adequate and not excessive. Replace dead plants and remove invasive vegetation.</p> <ul style="list-style-type: none"> <li>• Abate any potential vectors by filling holes in the ground in and around the planters and by insuring that there are no areas where water stands longer than 48 hours following the storm. If mosquito larvae are present and persistent, contact the Contra Costa County Vector Control District for information and advice. Only a licensed individual or contractor should apply mosquito larvicides only when absolutely necessary.</li> <li>• Trash enclosure areas to be routinely inspected, cleared of debris, and thoroughly cleaned every three months, or as required in the City’s NPDES permit.</li> <li>• All inlets to be inspected for debris twice a year, with one of those inspections held on October 1st.</li> <li>• Planters should be checked for plant and landscape health. They should also be checked for removable amounts of silt. The landscape and planter soils should also be checked for aeration.</li> </ul>				

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<p><b>Mitigation Measure 13 – Hydrology</b> All lots shall include deed restrictions, which provide City and other public agency personnel with the right of access to inspect all on-site stormwater control devices. The language in the deed shall be reviewed and approved by the City Engineer and City Attorney.</p>	Project Developer	City Engineer  City Attorney	Prior to issuance of certificates of occupancy	
<p><b>Mitigation Measure 14 – Hydrology</b> The developer shall provide for flood proofing of those portions of the building below one-foot above the 100-year flood surface elevation. The method of flood proofing shall include operating procedures and be subject to the approval by the City’s Floodplain Administrator.</p>	Project Developer	City Floodplain Administrator	Prior to approval of improvement plans	
<p><b>Mitigation Measure 15 – Public Services</b> The Project developer shall pay a fair share contribution to the City of Clayton for impacts to police staffing directly related to impacts of the Creekside Terrace Project for a five-year period. The calculation and payment shall be made at the time of issuance of building permit for each of the Project’s units (including residential and commercial units) and shall be approved in advance by the Clayton Police Chief and City Manager.</p>	Project Developer	Clayton Police Chief  City Manager	Five year period following the issuance of the first building permit.	
<p><b>Mitigation Measure 16 – Public Services</b> The Project developer shall agree to the recordation of a conservation easement on the third parcel located west of Mitchell Creek, and shall assume full responsibility for the ongoing maintenance and upkeep of the parcel as well as the terminus of Center Street. The conservation easement shall preclude future development of said parcel while</p>	Project Developer	City Engineer  City Attorney	Prior to the approval of final map(s)	

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still allowing limited improvements, such as the proposed infiltration planter associated with the Creekside Terrace project.				