DRAFT
ENVIRONMENTAL IMPACT REPORT

COLLEGE SQUARE
PLANNED UNIT
DEVELOPMENT

SCH# 2002|22088

Volume 2 of 2
Technical Appendices

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City of Sacramento
Planning and Building Department

Prepared by:
EDAW

In association with
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Earthtech Ltd.

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College Square Planned Unit Development Draft EIR

TECHNICAL APPENDICES

VOLUME 2 OF 2

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SECTION 1. PURPOSE AND INTENT

College Square is a Planned Unit Development (herein referred to as "the PUD") constituting a total of approximately 53.25 net gross acres to be designated Shopping Center (SC) zone and multi family zone. These guidelines, as approved and accepted by the City of Sacramento City Council, shall be adopted and used by the PUD's and the City. The Owner(s) and/or Owner's representative(s) shall be responsible for establishing and maintaining the, codes, covenants and restrictions identifying the terms and criteria for membership and providing successors. The CC&R shall adhere to the following objectives in reviewing development plans:

1. To develop the land in the PUD in a manner which complements and enhances the value of the land and the structures within and adjacent to the PUD.

2. To provide a guide for the use by architects, engineers, City staff, and elected and appointed City decision-makers during the review process for each Special Permit requested for development in the PUD.

3. To establish circulation, safety, comfort, convenience and general welfare.

The guidelines shall incorporate the Schematic Plan for the College Square PUD as approved by the City Council. These Guidelines are intended as a supplement to existing City Ordinances and shall prevail when different from other applicable City Ordinances. Any amendments hereto can only become effective upon approval by the Planning Commission which the City Council of the City of Sacramento.
SECTION II.  PROCEDURES FOR APPROVAL

A.  **Special Permit Required:** Development of certain uses within the PUD shall be subject to Special Permit approval by the City Planning Commission. These uses are specifically listed in Table 1 of these guidelines. Special Permit development plans shall be in conformance with the Schematic Plan and PUD Guidelines approved by the City Council. The PUD Guidelines shall establish the architectural theme(s) for the PUD.

B.  **Preliminary Review:** Preliminary plans shall be submitted to the Planning Director for preliminary review prior to submission of an application to amend the PUD Guidelines and/or Schematic Plan. A preliminary review of Special Permit applications may be required when the City determines that such a review is essential to a thorough review.

C.  **Project Application:** The following information shall be submitted with a Special Permit application:

1.  **Project Application:** The project application shall include the names and addresses of the applicant, architect, contractor, developer and engineer.

2.  **Site Plan(s):** The Site Plan shall show the following:

   a.  All roads, street names, easements, bus stops, and public right-of-way.

   b.  Topography showing existing grades and proposed grades at one-foot intervals with spot elevations as required to clarify drawings, together with building corner elevations.

   c.  Locations of existing buildings, proposed buildings, and proposed building pads.

   d.  Front, side and rear setbacks and distances from buildings to property or parcel lines at perimeter of PUD.

   e.  Locations and details of site drainage including pipes, berms, ditches, swales, sewer alignments, manholes, and invert grades.

   f.  On-site circulation including ingress/egress, driveways, parking areas and typical parking stalls, maneuvering aisles, loading, truck delivery routing and service areas, walkways, and any outdoor seating or gathering areas.

   g.  Locations of trash enclosures, compactors, recycling facilities (including outside storage and screening devices for trash), mechanical and communication equipment, and meters.

   h.  Sewer alignments and location of manhole and invert grades.

   i.  Land use for distribution including percentage and square footage of the site used for the following:

       1)  Building Pad.

       2)  Surface parking and any other areas.

       3)  Landscaping (includes private sidewalks and patios)

   j.  Bar Scale.

   k.  Phasing Scheme, if applicable.
1. Retaining walls as needed.

m. Temporary and permanent fences including materials and height

3. Landscaping Plan: The Landscape Plan shall be consistent with these Guidelines

4. Elevations: The building elevations shall be consistent with these Guidelines and shall show the following:
   a. Roof projections and/or roof plan and screening treatment.
   b. Exterior building elevations shall depict all sides and height to top plate and top of roof and screening elements.
   c. Exterior colors and materials of construction (prior to public hearing).

5. Miscellaneous Documentation: This information may be obtained concurrently with the processing of the Special Permit application, but shall be obtained prior to granting of any special permit.
   a. Written approval of the project plans by the College Square Architectural Review Committee
   b. Written documentation of consultation with Regional Transit regarding the impacts of the development design on transit efficiency and effectiveness in serving the entire development, if such development differs substantially from the PUD Schematic Plan or special permit(s) approved for the College Square project. Single tenant pad buildings and shop space of less than 15,000 square feet of building area shall not be subject to this requirement.
   c. Transportation Systems Management Plan submittal shall be regulated by, and be subject to, the provisions of the City Zoning Ordinance and/or provisions in the Mitigation Monitoring Plan developed by, and kept on file with the City’s Planning and Building Department under P98-074.
   d. Lighting Plan: The lighting plan shall be consistent with these Guidelines and shall show the following:
      1) Location of all exterior site lighting.
      2) Design of all exterior lighting including colors, materials, height, and approximate wattage.
      3) Plot plan showing overall luminance of the proposed lighting (i.e., foot candles)
   e. Signage Plan: A Signage Plan shall be submitted with each Special Permit Application, shall be consistent with these Guidelines and shall indicate the locations of all permanent signs. A separate signage permit will be required for construction of approved signage.
SECTION III. PROCEDURES FOR AMENDMENT

Amendments to the Schematic Plan and/or Guidelines shall be approved by the City Council or, in limited circumstances by the Planning Commission. The Schematic Plan approved by the City Council concurrently with these Development Guidelines is conceptual in nature, and adjustments that do not materially affect the nature or character of the PUD, such as building orientation, placement of buildings and entrances, landscaping, parking configuration, and relocation of land uses may be made during the Special Permit process without the need to amend the Schematic Plan.

The PUD schematic plan and special permit documents shall designate building limit lines. The size, number, and configuration of buildings within these lines may be modified without the need to modify the schematic plan or special permit. The overall building area for the PUD, however, cannot exceed that which was previously approved.
SECTION IV. PERMITTED USES

A. Compliance with Schematic Plan: Compliance with Schematic Plan shall be determined by the Planning Commission for Special Use Permits or by the Planning Director for minor modifications to the Schematic Plan as described above. Section III of the Guidelines outlines procedures for amendment of the Schematic Plan.

B. Permitted Uses: The intent of the PUD is to serve the surrounding area with:
Neighborhood-oriented and community serving retail uses; residential uses; office uses; public uses, including transit stations and related uses.
Areas North of W. Stockton Blvd. will be designated for community and neighborhood retail uses, with pedestrian links provided to the mixed use/transit oriented development area south of the future extension of West Stockton Boulevard. The eastern quadrant of this mixed use area will be comprised principally of multi-family and senior residential uses with residential, office and commercial uses allowed in area parallel to the South side of West Stockton Blvd and East of Bruceville Road. The Westerly half of the area south of Bruceville Rd, excepting the commercially zoned parcels may be utilized by the Sacramento Regional Transit District (RT) for a transit center comprised of one or more of the following components: Light Rail station, bus transfer station, multi-modal station, park and ride lot. Should this area be utilized for any such RT uses, joint use opportunities with RT will be strongly encouraged, including shared parking, mixed retail/residential and/or retail/office development, and convenient pedestrian linkages between uses.

C. Building and Occupancy Standards: The overall non-residential building square footage as approved in the PUD has been indicated on the schematic site plan. The Planning Commission, in accordance with Section 8-D of the Sacramento City Zoning Ordinance, may approve increases in the overall building square footage that do not exceed a maximum of ten percent (10%) of the overall square footage as approved in the PUD. A range of residential units from a minimum of 484 to a maximum of 724 units, if the transit station park and ride lot is located off-site, are approved for the College Square PUD.

D. Fencing and Walls Requirement: Open fencing with pedestrian gate access at regular intervals shall be encouraged along property lines where residential uses abut non-residential uses. No fencing or dividing structures of any kind shall be required in areas designated for transit-mixed use development. Solid (e.g., masonry walls) shall be discouraged between residential and non-residential uses within the plan areas in order to best facilitate the open area master plan.

E. Hours of Operation: Commercial uses, daycares and senior care facilities in the PUD may operate 24 hours a day, except as otherwise limited by the planning commission or city council through the special permit process.
Table 1

Accessory Uses

Retail

- Food Sales – Indoor & Outdoor
- Exterior staging & temporary
- Storage of merchandise
- Sales of seasonal items from parking area or sidewalk, i.e. Christmas Trees
- Unlimited delivery times
- Unlimited sales from perimeter sidewalks

Special Permit Uses

Retail

- Retail Store over 65,000 square feet not previously approved in overall building footprint under schematic plan with or without fuel service
- Animal Hospital

Food

- Fast Food Drive-Thru

Entertainment

- Theatre

Service Station

- 24 hour Convenience Market consumption per City of Sacramento Zoning Ordinance
- Fuel Sales Kiosk

Telecommunications Tower

Multi-Family Residential

- Apartments
- Condominiums
- Townhouses

Senior Housing

- Assisted Living
- Independent Living
- Senior Apartments
- Skilled Nursing Facilities

Permitted & Accessory Uses

Principally Permitted Uses

Food

- Convenience Food Store
- Delicatessen
- Restaurant

Entertainment

- Arcade
- Bowling Alley
- Dancing Studio
- Game Rooms
- Health/Exercise Center
- Music & Dance Studio

Retail

- Alcoholic Beverages for off premises consumption
- Antique Shop
- Apparel Store
- Appliance Sales & Repair
- Art Supply Store
- Audio Visual Equipment
- Auto Supply Store
- Auto Service
- Auto Oil Change/Lube
- Bakery
- Banks & Financial Institutions
- Barber Shop
- Battery Sales & Storage
- Beauty Parlor
- Bicycle Sales & Repair
- Book & Stationery Store
- Business Machine Store
- Childcare & K-6 Schools
- Clothing & Costume
- Coffee Shops
- Computer Sales & Services
- Dry Cleaning
- Educational Seminars & Schools
- Electronic Appliances
- Exterior Storage/Materials
- Florist
- Furniture Store
- Garden Supply Store
- General Merchandise
- Gifts & Notions
- Grocery
- Gymnasium
- Hardware Store
Table 1 Continued

Retail Cont.
• Health Clubs
• Hobby, Stamps & Coins
• Home Improvement
• Hunting/Fishing Supply
• Interior Decorating Supply
• Jewelry & Metal Craft
• Leather Goods & Luggage
• Lock & Key Shop
• Lumber Yard
• Mail Order Catalog Store
• Medical/Dental Services & Appliances
• Music Sales & Repair
• Office Supply & Equipment
• Optician
• Package Liquor Store
• Paint & Wallpaper Store
• Pet Shop
• Pet Supplies
• Photo Equipment & Supply
• Plant Nursery
• Plumbing Shop
• Radio/Television Sales
• Shoe Sales & Repair
• Sporting Goods
• Tailor Shop
• Telephone Sales & Services
• Tire Sale, Repair & Mount.
• Toy Store
• Travel Agency
• Variety Store

Hotel Uses
• Hotel & Motel

Office Uses
• Professional Offices
• Home Occupation Offices
• Multi-Floor Offices up to Three Floors
• Medical & Dental Uses
• Combination Office and Retail, Office and Residential, or Retail and Residential Uses

Public Facilities
• Light Rail Station
• Bus Transfer Station
• Multi-modal Center
• Park and Ride Lots
• Library
• Police Station
• Fire Services
SECTION V. ENVIRONMENTAL STANDARDS

A. General: All buildings, structures, paved areas and building materials, color schemes, and landscape elements shall be designed and constructed so as to create a unique and desirable environment for the intended use(s). The project should be distinctive as viewed from along the major roadways.

B. Landscaping:

1. Objectives:
   a. Reinforce the major pedestrian connection systems that abut the roads and driveways and the pedestrian connections between the retail, transportation, office and residential areas.
   b. Provide for human scale and visual organization in parking lots.
   c. Loading areas, service yards, and utility equipment shall all be screened where practical using enhanced landscaping.
   d. Design the landscaping to maximize energy conservation, human comfort, and promote biodiversity with the introduced landscape.
   e. The landscape concept shall encourage and frame views of the project.
   f. Internal streets and major pedestrian circulation routes shall be articulated differently from the parking field in order to reinforce the design theme, identify the circulation system as a way-finding element, and to reduce the scale of the parking field.
   g. Landscape enhancements at internal drives and pedestrian circulation routes may include ornamental tree plantings and vertical tree plantings.

2. General: Landscaping shall comply with applicable City of Sacramento ordinances for drought tolerance and shall be composed of natural and decorative trees, ground cover and shrubs with automatic irrigation systems.

3. Approval of Landscape Plans: Special Permit applications shall include submittal of preliminary landscape and shading plans. The purpose of the Landscape Plan is to ensure integration and compatibility of landscaping for the site.

4. Plant List: All trees, shrubs, and groundcover types shall conform to the following PUD Plant List (Table 2list4ed at the end of this section) unless an alternative type is approved by the City's Planning Director or Planning Commission.

5. Additional Accent Planning to meet tenant criteria may be incorporated with approval of the Architectural Review Committee only.

6. Minimum Landscaping Coverage: The minimum landscape coverage percentage for any property or project within the PUD shall be pursuant to City standards.

7. The term “landscape area” shall refer to all areas within a given parcel not located in a structure and not utilized for truck loading, storage, or refuse collection. Landscape areas, unless otherwise indicated, may include all walkways, hardscape, landscaping, and treescape locations in parcel areas.

8. Parking and back-up space shall be landscaped to comply with the City of Sacramento Zoning Ordinance Section 17.68.010 c: “Trees shall be planted and maintained throughout the surface parking lot to ensure that within 15 years after the establishment of the parking lot, at least 50 percent of the parking area will be shaded.” Truck loading areas are not required to be shaded.
9. Major entry drives and internal streets are exempt from the shading requirements in order to provide distinctive planting or graphic elements that differentiate these areas from the overall parking field.

10. Underdeveloped Areas: All areas not utilized for circulation, parking and services shall be landscaped utilizing groundcover, shrubbery or trees. Underdeveloped areas proposed for future construction shall be maintained in a reasonably weed free condition but need not be fully landscaped.

11. Landscaping of Rear Building Elevations: Side and rear elevations of any building visible from surrounding roadways shall be landscaped with attractive, varying materials. However, such landscaping shall not interfere with the visibility and identification of business establishments.

12. Screening of Service Areas: Architecturally designed, compatibly-styles structures with plantings shall be used to screen service areas for loading, trash and recyclable material storage, and any approved external storage areas. It is contemplated, however, that landscaping features could interfere with the successful operation of a business or approved use. When/if this occurs, such landscaping may be modified in a manner to reduce such conflicts. A minimum 6'-0" high wall shall be provided at trash enclosures and loading areas. Note: Trash and recycling containers within enclosed loading areas are not required to have separate enclosures.

13. Installation of Landscaping: Prior to the issuance of any temporary certificate of occupancy permit, each project’s landscaping, including permanent automatic irrigation system, shall be installed to the City’s satisfaction. Plants shall vary in size: 1 and 5 gallon shrubs; 15 gallon and 24 inch box trees.

14. Landscape Maintenance: A landscape maintenance program shall be established to ensure that the landscape elements are well maintained. All landscaped areas shall be fully irrigated with a permanent automatically controlled underground irrigation system.

15. All landscaped areas within each zone shall be planted and irrigated in accordance with the planting palettes and criteria recommended in these design guidelines. All trees shall be double staked. Trees shall be secured with flexible tree ties and shall be staked in at least two laces on species such as Chinese Pistache where extra support is required to maintain a straight trunk.

16. The irrigation system shall be designed to minimize spray onto non-planted areas.

17. All irrigation heads within traffic or pedestrian areas shall be pop-up type heads. No fixed risers are permitted in these areas.

18. Irrigation systems shall be designed to provide the appropriate amount of water to each plant as efficiently as possible without over-watering.

19. The owner of each parcel shall at times properly maintain and keep the entire parcel, including all improvements, in a safe, clean and sightly condition, in a good state of repair, and shall comply in all respects with all governmental, health, fire and police requirements.

20. The owner of each parcel shall, at his/her own expense, remove rubbish of any character whatsoever which may accumulate on such parcel.

21. Undeveloped parcels shall be maintained in a neat, weed-free condition at the owner’s expense.
Table 2

PLANT LIST

All plant materials must be selected from the Plant Species List below and other plants as approved by the Planning Department, subject to confirmation from site-specific soils analysis that plant species will survive.

Large Trees (50’ – 100”)

WATER USAGE

<table>
<thead>
<tr>
<th>Category</th>
<th>Species</th>
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<tbody>
<tr>
<td>HIGH</td>
<td>Acer rubrum</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Acer saccharum</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Aver plantanoides</td>
</tr>
<tr>
<td>HIGH</td>
<td>Alnus rhombifolia</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Araucaria heterophylla</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Calocedrus decurrens</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Catalpa speciosa</td>
</tr>
<tr>
<td>LOW</td>
<td>Cedrus deodara</td>
</tr>
<tr>
<td>LOW</td>
<td>Celtis australis</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Cinnamomum camphora</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Ginkgo Biloba</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Gelditsia triacanthos</td>
</tr>
<tr>
<td>HIGH</td>
<td>Liriodendron tulipifera</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Magnolia grandiflora</td>
</tr>
<tr>
<td>HIGH</td>
<td>Picea abies</td>
</tr>
<tr>
<td>HIGH</td>
<td>Picea pungens</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Pinus canariensis</td>
</tr>
<tr>
<td>LOW</td>
<td>Pistacia chinensis</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Platanus acerifolia</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Platanus racemosa</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Populus nigra “Italica”</td>
</tr>
<tr>
<td>LOW</td>
<td>Quercus lobata</td>
</tr>
<tr>
<td>LOW</td>
<td>Quercus suber</td>
</tr>
<tr>
<td>LOW</td>
<td>Quercus wisiizenii</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Quercus robur</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Quercus rubra</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Quercus wilisennii</td>
</tr>
<tr>
<td>LOW</td>
<td>Sequoa sempervirens</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Ulmus parvifolia</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Zelkova serrata</td>
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Medium Trees (30’ – 50’)

WATER USAGE

<table>
<thead>
<tr>
<th>Category</th>
<th>Species</th>
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<tbody>
<tr>
<td>MEDIUM</td>
<td>Alnus cordata</td>
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<tr>
<td>HIGH</td>
<td>Betula jacquemontii</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Capinus betulus</td>
</tr>
<tr>
<td>LOW</td>
<td>Celtis sinensis</td>
</tr>
<tr>
<td>LOW</td>
<td>Ceratonia siliqua</td>
</tr>
<tr>
<td>LOW</td>
<td>Cercidium floridum</td>
</tr>
<tr>
<td>LOW</td>
<td>Cercis Canadensis</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Liquidambar styraciflua</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Magnolia grandiflora</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Maytenus boaria</td>
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<td>MEDIUM</td>
<td>Morus alba “Fruitless”</td>
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## High (Nyssa sylvatica)
- Sour Gum
- Allepo Pine
- Afghan Pine
- Scotch Pine
- Fremont Cottonwood
- Ornamental Pear
- Holly Oak
- Chinese Tallow Tree
- California Pepper Tree
- Pagoda Tree
- Linden
- California Bay

### Small Trees (15' – 30')

**WATER USAGE**

<table>
<thead>
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<th>Water Usage</th>
<th>Species</th>
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<tbody>
<tr>
<td>Low</td>
<td>Acacia baileyana</td>
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<td></td>
<td>Acer ginnala</td>
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<tr>
<td>High</td>
<td>Acer palmatum</td>
</tr>
<tr>
<td>Low</td>
<td>Albizia julibrissin</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Arbutus unedo</td>
</tr>
<tr>
<td>Low</td>
<td>Cercis occidentalis</td>
</tr>
<tr>
<td>High</td>
<td>Cornus florida</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Crataegus laevigata</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Crataegus phaenopyrum</td>
</tr>
<tr>
<td>Low</td>
<td>Eleagnus angustifolia</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Eriobotrya deflexa</td>
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<tr>
<td>MEDIUM</td>
<td>Geijera parviflora</td>
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<tr>
<td>MEDIUM</td>
<td>Koelreuteria paniculata</td>
</tr>
<tr>
<td>Low</td>
<td>Lagerstroemia indica</td>
</tr>
<tr>
<td>High</td>
<td>Ligustrum lucidum</td>
</tr>
<tr>
<td>High</td>
<td>Magnolia soulangiana</td>
</tr>
<tr>
<td>High</td>
<td>Magnolia stellata</td>
</tr>
<tr>
<td>High</td>
<td>Malus spp.</td>
</tr>
<tr>
<td>High</td>
<td>Malus floribunda</td>
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<tr>
<td>High</td>
<td>Podocarpus gracilior</td>
</tr>
<tr>
<td>High</td>
<td>Prunus serrulata</td>
</tr>
<tr>
<td>Low</td>
<td>Prunus lyonii</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Prunus blieriana</td>
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<td>MEDIUM</td>
<td>Prunus cerasifera</td>
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<td>MEDIUM</td>
<td>Prunus caroliniana</td>
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<tr>
<td>MEDIUM</td>
<td>Pyrus kawakami</td>
</tr>
<tr>
<td>Low</td>
<td>Raphiolepis x</td>
</tr>
<tr>
<td>Low</td>
<td>Rhus lancea</td>
</tr>
<tr>
<td></td>
<td>Bailey Acacia</td>
</tr>
<tr>
<td></td>
<td>Amur Maple</td>
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<tr>
<td></td>
<td>Japanese Maple</td>
</tr>
<tr>
<td></td>
<td>Silk Tree</td>
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<tr>
<td></td>
<td>Strawberry Tree</td>
</tr>
<tr>
<td></td>
<td>Western Redbud</td>
</tr>
<tr>
<td></td>
<td>White Eastern Dogwood</td>
</tr>
<tr>
<td></td>
<td>English Hawthorn</td>
</tr>
<tr>
<td></td>
<td>Washington Hawthorn</td>
</tr>
<tr>
<td></td>
<td>Russian Olive</td>
</tr>
<tr>
<td></td>
<td>Bronze Loquat</td>
</tr>
<tr>
<td></td>
<td>Australian Willow</td>
</tr>
<tr>
<td></td>
<td>Goldenrain Tree</td>
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<tr>
<td></td>
<td>Crape Myrtle</td>
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<tr>
<td></td>
<td>Glossy Privet</td>
</tr>
<tr>
<td></td>
<td>Saucer Magnolia</td>
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<td></td>
<td>Star Magnolia</td>
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<tr>
<td></td>
<td>Snow Crabapple</td>
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<td>Flowering Maple</td>
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<td>Fern Pine</td>
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<td>Flowering Plum</td>
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<td>Purple Leaf Plum</td>
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<tr>
<td></td>
<td>Carolina Laurel Cherry</td>
</tr>
<tr>
<td></td>
<td>Evergreen Pear</td>
</tr>
<tr>
<td></td>
<td>&quot;Majestic Beauty&quot;</td>
</tr>
<tr>
<td></td>
<td>African Sumac</td>
</tr>
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</table>

### Large Shrubs (6' – 15')

**WATER USAGE**

<table>
<thead>
<tr>
<th>Water Usage</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Abelia grandiflora</td>
</tr>
<tr>
<td>Low</td>
<td>Acacia baileyana</td>
</tr>
<tr>
<td>High</td>
<td>Aucuba japonica</td>
</tr>
<tr>
<td>Low</td>
<td>Berberis thunbergii</td>
</tr>
<tr>
<td>Low</td>
<td>Callistemon citrinus</td>
</tr>
<tr>
<td>High</td>
<td>Camellia japonica</td>
</tr>
<tr>
<td>Low</td>
<td>Ceanothus thyrsiflorus</td>
</tr>
<tr>
<td>High</td>
<td>Cocculus laurifolius</td>
</tr>
<tr>
<td></td>
<td>Glossy Abelia</td>
</tr>
<tr>
<td></td>
<td>Bailey Acacia</td>
</tr>
<tr>
<td></td>
<td>Japanese Aucuba</td>
</tr>
<tr>
<td></td>
<td>Barberry</td>
</tr>
<tr>
<td></td>
<td>Lemon Bottlebrush</td>
</tr>
<tr>
<td></td>
<td>Camellia</td>
</tr>
<tr>
<td></td>
<td>Blue Blossom</td>
</tr>
<tr>
<td></td>
<td>Laurel-leaf Snailseed</td>
</tr>
<tr>
<td>Water Usage</td>
<td>Medium Shrubs (3’ – 6’)</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------</td>
</tr>
</tbody>
</table>

### Water Usage

- **Abelia grandiflora**
- **Agapanthus orientalis**
- **Arbutus unedo “Compacta”**
- **Berberis thunbergii**
- **Buxus microphylla japonica**
- **Chaenomeles japonica**
- **Choisya ternate**
- **Cistus purpureus**
- **Citrus limon**
- **Echium fastuosum**
- **Escallonia “Fradesii”**
- **Pink Abelia “Sherwoodi”**
- **Lily-of-the-Nile “Alba”**
- **Dwarf Strawberry Tree**
- **Red-leaf Barberry “Atropurpurea”**
- **Japanese Boxwood**
- **Flowering Quince**
- **Mexican Orange**
- **Orchid Rockrose**
- **Lemon**
- **Pride of Madeira**
- **Escallonia**
| MEDIUM | Euonymus alata | Companct Winged Euonymus “Compacta” |
| HIGH | Gardenia jasminoides | Mystery Gardenia |
| MEDIUM | Grevillea “Noelli” | ncn |
| MEDIUM | Hydrangea macrophylla | Bigleaf Hydrangea |
| HIGH | Ilex crenata | Japanese Holly |
| LOW | Lavandula angustifolia | English Lavender “Munstead” |
| LOW | Lavandula stoechas | Spanish Lavender |
| HIGH | Ligustrum vulgare | Lodense Privet “Lodense” |
| LOW | Mahonia aquifolium | Oregon Grape |
| MEDIUM | Myrsine africana | African Boxwood |
| LOW | Nandina domestica | Dwarf Heavenly Bamboo “Compacta” |
| LOW | Nandina domestica | Heavenly Bamboo |
| LOW | Nerium oleander “Petite” | Oleander |
| MEDIUM | Phormium tenax “Maori Chief” | New Zealand Flax |
| MEDIUM | Pittosporum tobira | Tobira “Variegata” |
| HIGH | Polystichum munitum | Sword Fern |
| HIGH | Potentilla fruticosa | Cinquefoil |
| HIGH | Prunus glandulosa | Flowering Almond |
| LOW | Raphiolepis indica | India Hawthorn |
| HIGH | Rosa californica | Rose |
| LOW | Rosmarinus officinalis | Rosemary |
| LOW | Salvia clevelandii | ncn |
| LOW | Salvia greggii | ncn |
| LOW | Salvia leucantha | Mexican Bush Sage |
| MEDIUM | Sarcococca ruscifolia | ncn |
| MEDIUM | Spirea bumalda | ncn |
| MEDIUM | Spirea thunbergii | ncn |
| MEDIUM | Spirea vanhouttei | ncn |
| MEDIUM | Strelitzia nicolai | Giant Bird of Paradise |
| MEDIUM | Strelitzia reginae | Bird of Paradise |
| LOW | Viburnum tinus | ncn “Spring Bouquet” |
| LOW | Xylosma congestum | Shiny Xylosma “Compacta” |

**Small Shrubs (under 3’)**

**WATER USAGE**

| HIGH | Abelia grandiflora | White Abelia “Prostrata” |
| LOW | Agapanthus orientalis | Dwarf Lily-of-the-Nile “Peter Pan” |
| HIGH | Azalea indica | Azalea |
| LOW | Berberis thunbergii | Crimson Pygmy Barberry “Crimson Pygmy” |
| LOW | Eriogonum fasciculatum | California Buckwheat |
| HIGH | Gardenia jasminoides | “Little Gem” ncn |
| HIGH | Iris douglasianna | ncn |
| MEDIUM | Limonium perezii | Statice |
| LOW | Mahonia aquifolium | Dwarf Oregon Grape “Compacta” |
| LOW | Myrtus communis | Dwarf Roman Myrtle “Compacta” |
| LOW | Nandina domestica | Dwarf Heavenly Bamboo “Harbor Dwarf” |
| MEDIUM | Phormium tenax | New Zealand Flax “Jack Spratt” |
| MEDIUM | Pittosporum tobira | “Wheeler’s Dwarf” ncn |
| MEDIUM | Spirea nipponica | ncn |
| LOW | Teucruum chamaedrys | ncn |
| LOW | Tulbaghia violacea | Society Garlic “Variegata” |
### Ground Covers:

**WATER USAGE**

<table>
<thead>
<tr>
<th>Level</th>
<th>Plant Name</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>Arctostaphylos</td>
<td>&quot;Emerald Carpet&quot; ncn</td>
</tr>
<tr>
<td></td>
<td>Arctothea calendula</td>
<td>Cape Weed</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Campanula poscharskyana</td>
<td>Snow-in-Summer</td>
</tr>
<tr>
<td>LOW</td>
<td>Cerastium tomentosa</td>
<td>Rock Cotoneaster</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Ceratostigma plumbaginoides</td>
<td>“Minima”</td>
</tr>
<tr>
<td>LOW</td>
<td>Cotoneaster apiculatus</td>
<td>&quot;Glauc&quot;</td>
</tr>
<tr>
<td>LOW</td>
<td>Cotoneaster horizontalis</td>
<td>Ornamental Strawberry</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Euonymus fortunei</td>
<td>Ground Ivy</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Euonymus fortunei</td>
<td>English Ivy</td>
</tr>
<tr>
<td>LOW</td>
<td>Festuca californica</td>
<td>Daylily</td>
</tr>
<tr>
<td>LOW</td>
<td>Festuca ovina</td>
<td>Creeping St. John’s Wort</td>
</tr>
<tr>
<td>HIGH</td>
<td>Fregaria chiloensis</td>
<td>Trailing Lantana</td>
</tr>
<tr>
<td>LOW</td>
<td>Gazania</td>
<td>Blue Lily Turf</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Glechoma hederacea</td>
<td>Creeping Lily Turf</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Hederia helix “Hahnii”</td>
<td>Hall’s Honeysickle “Halliana”</td>
</tr>
<tr>
<td>LOW</td>
<td>Henerocallis sp</td>
<td>Moneywort</td>
</tr>
<tr>
<td>LOW</td>
<td>Hypericum calycinum</td>
<td>Dwarf Heavenly Bamboo “Harbor Dwarf”</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Lantana montevidensis</td>
<td>Mondo Grass</td>
</tr>
<tr>
<td>HIGH</td>
<td>Liriope muscari</td>
<td>African Daisy</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Liriope spicata</td>
<td>Spring Cinquefoil</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Loniceria japonica</td>
<td>Rosemary</td>
</tr>
<tr>
<td>LOW</td>
<td>Lysimachia nummularia</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Nandina domestica</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>Ophiopogon japonicus</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Osteospermum fruticosum</td>
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</tr>
<tr>
<td>HIGH</td>
<td>Potentilla verna</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Rosmarinus officinalis</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Santolina virens</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Santolina chamaecyparissus</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Thymus citriodorus</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Trachelospermum asiaticum</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Trachelospermum Jasminoides</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Verbena</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>Veronica spicata “Red Fox”</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Vinca minor “Bowles”</td>
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</tbody>
</table>

### Vines

**WATER USAGE**

<table>
<thead>
<tr>
<th>Level</th>
<th>Plant Name</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>Ficus pumila</td>
<td>Creeping Fig</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Gelsemium sempervirens</td>
<td>Carolina Jessamine</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Hardenbergia violacea</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Jasminum polyanthum</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Lonicera japonica</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Lonicera japoica</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Mandevilla laxa</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Parthenocissus tricuspidata</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Parthenocissus quinquefolia</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Passiflora pfordtii</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Rosa banksiae</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Rosa banksiae “Lutea”</td>
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</tr>
<tr>
<td>MEDIUM</td>
<td>Trachelospermum Jasminoides</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Wisteria sinensis “Blue”</td>
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</table>
Ornamental Grasses
WATER USAGE

<table>
<thead>
<tr>
<th>MEDIUM</th>
<th>Acorus</th>
<th>Sweet Flag</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDIUM</td>
<td>Arrhenatherum elatius bulbosum</td>
<td>Rattlesnake Grass</td>
</tr>
<tr>
<td>LOW</td>
<td>Festuca amethystine “April Green”</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Festuca ovina “Glauc”</td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Helictotrichon sempervirens</td>
<td>Blue Oat Grass</td>
</tr>
<tr>
<td>LOW</td>
<td>Imperata cylindrical rubra</td>
<td>Japanese Blood Grass</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Miscanthus sinensis</td>
<td>Eulalia</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Muehlenbeckia rigens</td>
<td>Deer Grass</td>
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<tr>
<td>MEDIUM</td>
<td>Pennisetum setaceum</td>
<td>Purple-leafed Fountain Grass</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Stipa pulchra</td>
<td>Purple Needlegrass</td>
</tr>
</tbody>
</table>

C. Setbacks

1. Definitions:
   a. Street Setbacks: The amount of yard that must be dedicated to landscaping from back of curb. Up to 50% of the minimum setback may be within the City right-of-way.
   b. Side and Rear Yard Setbacks: The amount of yard that must be dedicated to landscaping.
   c. Attached or detached sidewalks or walkways, plazas, patios, curbs, landscape walls, signage and graphics, and landscaping may be installed within setback areas. Overhangs of up to three feet may be included in setback areas.
   d. Street Right-of-Way: In order to accommodate the meanderings or detached sidewalks, parking lots or buildings abutting public street frontages shall have a minimum 25-foot wide setback from back of curb. The areas shall be landscaped with a combination of trees, shrubs and groundcover from the approved Plant List in Section V.B.3. The height of shrubbery shall not exceed 30 inches.
   e. Front Setback Area: Special landscaping walls, signage, and graphics features shall be employed to enhance and designate the main frontage the PUD along Bruceville Road. A minimum 25-foot wide landscape setback from back of curb shall be provided on Bruceville Road and Consumnes River College Blvd.
   f. Side Yard Setback: The property line at the edge of the PUD shall have a minimum landscape setback of 15’. Those areas facing the freeway shall be landscaped with a combination of trees, shrubs and groundcover from the approved Plant List shown in Table 2. The height of the shrubbery shall not exceed 30 inches.
   g. Rear Setback Areas: The setback areas along the south property lines shall accommodate a minimum 15-foot landscaped area. The areas shall be landscaped with predominately evergreen trees, shrubs and groundcover. This landscape setback may be within the proposed light rail easement.
   h. Internal property lines within the PUD have no setback requirements or landscaping regulations.
D. Circulation:

1. Pedestrian Circulation: Walkways shall be designated to link all buildings within the PUD. These walkways must provide connections to street access, bus stops, parking areas, adjacent structures and abutting properties. Walkways shall be designed with pedestrian health and safety in mind. Walkways shall be landscaped to provide shade in the summer and shall be constructed to visibly and physically delineate the walkway from other roads or vehicular access. Lighting, scaled to the needs of the pedestrian, shall be provided for safety and aesthetics.

2. Connection: Walkways and related facilities shall be connected to the City’s pedestrian/bicycle circulation system. Connection shall be designed and constructed to the satisfaction of the City Engineer.

3. Truck Circulation: Truck loading areas for major tenants over 20,000 s.f. shall be located to the rear or sides of the buildings. Small tenants and buildings are not required to have separate loading facilities and may be served from the front of their building.

4. Accessible Entrance: Safe and convenient access to the site and to all building entrances shall be provided in accordance with the American with Disabilities Act. Access points shall have minimal grade changes, curb cuts, ramps and railings integrated into the overall design in accordance with accessibility regulations.

E. Parking Standards:

1. Use Requirements:

   a. The overall parking requirement for all commercial uses within the College Square PUD is one space per 250 square feet of net building area. Reciprocal parking shall allow compliance based on the entire PUD requirement rather than on a parcel-by-parcel basis.

   b. Multi family residential uses shall be provided one parking space per unit. Senior independent living 3 spaces for every 4 units, assisted living one space per 4 units, and skilled nursing shall be provided one space per 10 units per bed.

   c. Additional parking for Garden Center and other outdoor promotional sales areas is not required.

2. Location of Parking

   a. Transportation Systems Management: Carpool, vanpool and bicycle parking spaces shall be located near the building entrances

   b. Accessible Parking: Accessible parking spaces shall be located closest to the employee and customer entrances to the building. Accessible parking spaces shall be distributed across the site on a prorata basis for the entire center rather than on a parcel by parcel basis.

   c. Bicycle Parking: Bicycle racks and enclosures/lockers for public use shall be located within public view, out of the way of pedestrian movement, and within site at building entries. Bicycle enclosures/lockers for employee use may be located in employee areas outside of public view. The number and type of bike racks and enclosures required shall be as specified in the City Zoning Ordinance unless otherwise specified in a PUD Transportation System Management (TSM) plan.
d. Reciprocal Parking: To eliminate the need for entitlement(s) to allow reciprocal parking, reciprocal parking between adjacent parcels within the PUD shall be allowed, provided that appropriate access agreements are recorded and that minimum parking is provided for all uses.

3. Parking Lot Construction Requirements:

a. Stall dimensions and maneuvering areas shall correspond to the standards provided in the City Zoning Ordinance. The use of individual prefabricated wheel stops is discouraged.

b. A maximum of 40 percent of all vehicle-parking spaces may be compact spaces.

c. Curbs, drives and parking surfaces shall be constructed in accordance with current City Standards.

d. Textures: Driveway entrances and walkways shall be identified by asphalt or stamped and/or colored asphalt or concrete, brick or tile pavers, exposed aggregate or other similar material.

F. Exterior Lighting:

1. Exterior Lighting is to be designed in a coordinated manner that enhances the quality image of this project, provides safety and security for all users in the project and is compatible with surrounding development.

2. Illumination of tenant signage must be coordinated and consistent. Neon lighting may be used and must be compatible with other lighting in the project. Exterior illumination should be color-corrected, warm-white in tone. Differing types of illumination must be designed to be compatible.

3. Parking lots lighting shall be metal halide light source.

4. Parking lot pole heights shall not exceed 20’ feet.

5. Throughout the project area, sodium vapor lighting is discouraged.

6. Soffit or wall-mounted down lights at building entrances are preferred (same light source).

7. Service doors, metal boxes, aboveground transformers and other utilities should not be highlighted with lighting.

8. All exterior lighting must be shielded to prevent off-site glare.

9. No security light fixtures shall be mounted above wall fascia or on roof of building.

10. Security lighting for man-doors shall use wall-mounted down lighting fixtures and not “Walpak” type fixtures, except in screened service areas. “Walpak” type security lighting fixtures are permitted only behind screen walls or opaque landscaping in loading and service areas.
11. Lighting design shall be such as not to produce hazardous glare to motorists, building occupants, residents of adjacent areas, or the general public.

12. No roof-top lighting, including searchlights, illuminating advertisements, or balloons shall be permitted except in the case of security lights if deemed necessary and installed so as to not be intrusive to neighboring property owners and motorists.

13. Site walls may be ground illuminated.

14. Covered accent lighting will be allowed.

G. Performance Standards:

1. Purpose and Intent: It is the intent of these Guidelines to prevent any use in the PUD which may create dangerous, injurious, noxious or otherwise objectionable conditions.

2. Nuisances: No nuisance shall be permitted to exist in the PUD. The term “nuisance” shall include, but not be limited to, any use which:
   a. Emits dust, sweepings, dirt, fumes, odors, gases, or other substances into the atmosphere that may adversely affect the health, safety, or welfare of persons working within the PUD or residing in adjacent neighborhoods.
   b. Discharges of noxious liquids or solid wastes or other harmful matter into any stream, river, or other body of water which may adversely affect the health, safety, or welfare of persons working within the PUD or residing in adjacent neighborhoods.
   c. Exceeds permissible noise levels as established by the City’s Noise Ordinance.
   d. Stores hazardous or toxic materials on-site unless in compliance with all applicable governmental regulations.

3. Public Safety: To protect and enhance the public safety, the following measures shall be implemented:
   a. A minimum lighting level of 1.5 foot candles as measured at the parking lot surface shall be maintained from one hour before dark until one hour after dark. A higher level of lighting is also allowed.
   b. Individual businesses in the PUD shall have well lit, clearly visible, and well defined addresses.
c. A PUD Management Plan which details security measures shall be submitted for the review and approval of the City Planning Director and City Police Department at least two weeks before the issuance of any occupancy permits.

d. Should unauthorized after-hours use of the PUD parking lot become a problem following completion and operation of the PUD, the Owner(s) of the PUD and the City Police Department shall meet to develop and implement additional security measures and modifications to the Security Management Plan. If the security measures and modifications fail to reduce the problems arising from the unauthorized use after a reasonable period of time had elapsed, then the Police Department may require the Owner to close the parking areas with gates during after-hours periods to prevent unusual levels of criminal activity or loitering from taking place at the PUD. Before installation of the gate, the design and location of the gates shall be reviewed and approved by the City Planning Division, the City Traffic Engineer, and the Police Department. If no agreement can be reached on additional security measures or gates for the parking area, the Owner(s) of the PUD may appeal the matter to the City Planning Commission for a determination. The decision of the Planning Commission may be appealed to the City Council for final determination.

e. All parcels shall be posted with signs indicating “No Skateboards,” “No Scooters,” “No Rollerblades or Skates,” and “No Loitering” and prohibit other such interests and unsafe conditions.
SECTION VI. BUILDING STANDARDS

Purpose and Intent

The purpose of the following architectural design guidelines is to foster an orderly and aesthetically pleasing development of high quality architecture that provides for diversity within a consistent architectural vocabulary.

The PUD is divided into three general themed areas.

- The first area (A) north of West Stockton Blvd. contains primarily neighborhood serving retail uses and backs directly onto Consumnes River College Boulevard.

- The second area (B) south of West Stockton Blvd. contains more local servicing uses and is oriented more towards the transit patrons and West Stockton Boulevard.

- The third area south of West Stockton Boulevard, eastern quadrant, contains more multi-family dwelling uses.

- The three areas may differ in material, articulation, and theme.

Buildings in each area shall be designed to convey an image of consistency and quality. Natural materials may be used to create a environment that promotes a sense of establishment and permanence. No attempt should be made to establish a thematic that tries to literally reproduce a historic architectural style, i.e. Spanish, Western, etc.

A. Architectural Design:

The PUD shall have multiple architectural building themes. The intent of the design is to establish thematic intent and diversity within the PUD allowing for and achieving design diversity between each group of buildings. Consistent use of themes, materials, colors, and the building orientations shall be applied to the circulation systems within the PUD. The design of the PUD shall be compatible with the nearby and adjacent land uses and visually interesting from the surface streets. All building entries shall be well defined and may provide employee access through rear entrances.

B. Building Setbacks:

In order to promote the opportunity for an active street scheme and enrich the pedestrian experience, building setbacks shall be the same as the landscape setbacks listed elsewhere in these guidelines with the following exceptions.

Buildings adjacent to residential uses shall have a minimum setback of 50' - 0". Any setbacks not identified above shall be as required by the City Zoning Ordinance or as approved by the City Planning Director. Setbacks along the public right-of-way shall be varied to avoid monotony of the streetscape.

C. Building Height:

For major tenants and inline shop buildings, the maximum height shall be 45 feet, which includes architectural details, such as tenant entries and towers. For pad buildings, the maximum height shall be 35 feet, with architectural details, such as tenant entries and towers, not to exceed 35 feet in height. Office buildings may not exceed 45 feet in height provided that if residential uses are included in any office structure, the maximum height may be increased to 65 feet. Residential
structures may be no more than three floors except for residential care facilities immediately adjacent to the Rapid Transit Park & Ride which may be up to five floors in height.

D. Exterior Building Materials:

1. Finished building materials shall be applied to all sides of the building, including trash enclosures and mechanical and communications equipment screens.

2. Consistent building materials, architectural style, textures, colors, roof treatment and landscaping shall be utilized on all sides of buildings visible from roadways, adjacent properties or the general public.

3. All screening materials for HVAC, SMUD boxes, and other mechanical and/or communications equipment shall be compatible with the exterior building materials.

4. Stone or masonry columns should be used to support covered promenades, trellises and tenant entries.

5. A consistent cornice treatment should be used to articulate the top of the buildings throughout each of the themed areas.

6. Parapets heights shall be high enough to screen roof-mounted equipment from finish grade at roadways immediately adjacent to the site. Changes in parapet height shall be used to enhance tenant entries, provide tenant individualization, and articulate building elements (i.e., parapets and corners).

7. Building materials may consist of tilt up concrete, masonry, stone, cement plaster, metal, or other surface materials. Roof canopies and exposed roofing may be tile, metal, glass or Kalwall glazing. Roofing material and color should be consistent throughout each of the themed areas. Awnings may be either metal, glass, canvas, or other material approved by the Architectural Revision Committee.

8. Tenant entry facades should contain the primary tenant identification signs. The length, width, and height of the facade should accommodate a hierarchy of retailers to reflect the promotional value of each tenant.

9. Towers may be developed either in conjunction with tenant entries or as freestanding thematic elements. Any tower should be accented with lighting.

10. Exposed unpainted concrete block is not acceptable for exposed exterior surfaces other than in concealed service areas. However, the intent is not to preclude such concrete block construction as split face block, combed face block, texture block, slump stone or other similar materials.

E. Colors:

1. All colors shall be interesting and varied, but harmonious and compatible with the colors of other buildings in the PUD. The color scheme shall be subject to review and approval by the Committee.

2. Variations in color or multiple colors shall be appropriate with an overall, planned, and attractive palette of colors. Building colors shall be diverse with contrast of color value, tone and hue. The use of primary colors, bright colors and glossy colors may be used as accents or main building colors. Contrasting materials, patterns, textures, and color are encouraged to create interest, focus, unity and compatibility for building face accent areas or features.
F. Pad Buildings

Pad buildings should contain diverse elements within the themed area where it is located. Due to the wide variety of individual tenant requirements and the "accent" nature of these buildings, the "Committee" shall liberally interpret their compliance with these guidelines.

G. Roof Projections and Design:

All air conditioning units, ventilating equipment, other mechanical equipment and communications equipment shall be completely screened or enclosed with materials compatible with the materials and colors of the exterior building finish.

H. Energy Conservation Standards:

1. Purpose and Intent: The purpose of these standards is to set forth cost-effective energy saving measures, which shall be incorporated into building design.

2. Buildings shall be designed to meet current State and Federal energy conservation requirements at the time of construction.

3. Landscaping shall be designed to shade structures, walks, streets, drives and parking areas so as to minimize surface heat gain.

4. Site design shall consider thermal and glare impacts of construction materials on adjacent structures, walkways, streets, drives, parking areas and vegetation.

5. Outdoor lighting shall provide the minimum level of site lighting commensurately with site security. A minimum of 1.5-foot candles as measured at the parking lot surface shall be maintained form one hour before dark until one hour after dark. A minimum of .25 foot candles shall be maintained along all alcoves and walkways.

6. Periodic energy-use audits shall be conducted by SMUD to identify wasteful consumption practices and opportunities for energy conservation.

I. Temporary Structures:

Temporary structures permitted include those related to the construction of a permanent building. Such structures may be placed on-site at the start of project construction but shall be removed at completion of construction of the permanent structures. Examples of such structures are trailers, mobile homes and other structures not affixed to the ground. Such structures shall be inconspicuous as possible and shall cause no inconvenience to the general public.

J. Loading Areas:

1. Truck loading dock(s) shall be an integral part of commercial structures. Loading areas oriented to any public right-of-way or adjacent to residentially zoned or utilized properties shall be screened at ground level adjacent to the loading area. Screening from varied roadways and bridges shall not be required. The facilities shall not create a nuisance and shall be located in the most inconspicuous manner possible.

2. The site plan must provide adequate on-site space for service and delivery vehicles. Landscaped islands, curbs, and signs shall be used to clearly distinguish parking from loading and delivery areas and driving lanes.

K. Outside Storage:
1. Open-air storage of materials, supplies, equipment, mobile equipment, finished or semi-finished products or other articles are discouraged. All exterior storage areas shall be screened from view with landscaping and/or walls consisting with the architecture of the building.

2. No outside storage of overnight delivery trucks or fleet vehicles shall be permitted.

L. Trash Enclosures/Recycling Facilities/Trash Receptacles:

1. Trash enclosures and/or recycling facilities shall be located away from adjacent residential areas and in the most inconspicuous manner possible so as not to create a nuisance.

2. Outside garbage and recycling facilities shall not be located within any required landscaped setback area.

3. Outside garbage and recycling facilities shall be concealed by a minimum 6-foot high screening wall constructed of materials similar to and compatible with the building(s) it serves. Landscaping (shrubs and/or vines) shall be placed along the screening walls to soften the presence of the facilities. Trees shall be provided to screen the overview of trash and garbage from the upper floors of adjacent or nearby buildings.

4. Outside garbage and recycling facilities shall have decorative, solid heavy gauge metal gates and cane bolts to secure the gates when in the open or closed position.

5. Construction and design of garbage/recycling facilities shall meet all City standards.

6. Outside trash receptacles shall not be located in any required setback area and shall be designed to match the color, design, and materials of the shopping center buildings.

7. Trash enclosures shall be designed to allow walk-in access by tenants without the need to open the main enclosure gates.

M. Garden Center

Garden Center enclosures should be integrated into the architectural vocabulary of the particular themed area. Fencing and/or greenhouses should be provided with a colonnade to watch the building. Fencing may be a combination of solid wall, or ornamental metal. Vinyl coated chain link fencing shall be limited to enclosing the city mitigation pond for the mitigation agreement with the Department of the Interior. Indoor plant enclosures or covered canopies shall be compatible with the building is serves.

N. Utility Connections, Mechanical Equipment and Communications Equipment:

1. Placement of mechanical and communications equipment, utility meters, and storage tanks shall be located within the building whenever possible.

2. If such equipment cannot be located within a building, visual barriers such as walls or landscaping shall be used.

3. Equipment shall not be located adjacent to residential areas or within any required landscaped setback area.

4. Equipment shall be located so as not to cause nuisance or discomfort from noise, fumes, odors, etc., unless prohibited by utility companies.

5. All new utility lines shall be underground.
6. Penthouse and equipment screenings shall be of a design and material harmonious with the related buildings.

7. The design of visual barriers will be subject to review and approval by the City Police Department prior to construction.

Q. Walkways:

1. General: Walkways will be located throughout the PUD as shown in the approved Schematic Plan for the project.

2. Materials: Walkway materials shall be compatible with the buildings in the PUD. Surfaces shall have a non-skid finish. Layout and design shall provide maximum comfort and safety to pedestrians.

3. Connections: Walkway patterns shall have an obvious relationship to the buildings. Frequent, convenient, and covered walkway connections shall be provided along building frontages and, when feasible, between adjacent buildings, public sidewalks, and bus turnouts.

4. Lighting: Walkways shall be well lit to provide safety and convenience to pedestrians.

SECTION VII. SIGN CRITERIA AND REGULATIONS

A. Purpose: The purpose of this section is to aid in eliminating excessive and confusing signage, preserve and enhance the appearance of the PUD, safeguard property values, and encourage signage design which is integrated and harmonious with the building it serves.

B. General Requirements:

1. All signage proposals shall be subject to the issuance of City Sign Permit prior to their construction or establishment.

2. Written City approval of signage design (including content, materials, colors and size) and location shall be submitted with all Sign Permit applications.

3. The tenant or owner shall maintain all signage. Any needed sign maintenance and/or repair shall be completed within 15 days of initial damage or malfunction or be subject to City Code Enforcement.

4. Any aspect or feature not covered within these Guidelines shall be governed by the City’s Sign Ordinance.

C. Construction Requirements:

1. All electrical signs shall bear the UL label and their installation must comply with all local building and electrical codes.

2. No exposed conduit, tubing, or raceways will be permitted.

3. All conductors, transformers and other equipment shall be concealed.

4. All signs, fastenings, bolts, and clips shall be of hot dipped galvanized iron, stainless steel, aluminum, brass or bronze; no black iron of any type will be permitted.
5. All exterior letters or signs exposed to the weather shall be mounted at least three fourths of an inch (3/4") from the building to permit proper dirt and water drainage.

6. The location of all openings for conduit and sleeves in sign panels on the building shall be indicated by the sign contractor on drawings submitted to the City. Installation shall be in accordance with the approved drawings.

7. No sign makers’ label or other identifications will be permitted on the exposed surface of the signs, except those required by local ordinances which shall be located inconspicuously.

D. Special Signage:

1. Building Access: Each occupant who has a non-consumer door for receiving merchandise must apply on said door, in a location as directed by the City, two-inch high block letters, indicating the occupants name and address. When more than one occupant used the same door, each name and address shall be applied. Address numbers shall be provided and installed in the exact locations as stipulated by the U.S. Post Office. Color and design shall be approved by the City.

2. Door Lettering: Signage indicating the tenant name or logo, business hours, and emergency telephone numbers is permitted on the primary entrance. Such lettering shall not cover more than four (4) square feet of the entire door. Color and design shall be compatible with the architectural detailing and approved by the City.

3. Window Lettering: Signage indicating the tenant name or logo, business hours, and emergency telephone numbers is permitted on the exterior window(s). Such signage shall not cover more than eight (8) square feet of the windows. Color and design shall be compatible with the architectural detailing and approved by the City.

4. Floor Signs: Floor signs, such as insets into terrazzo, special tile treatment, etc. may be permitted within the occupant’s lease line or property line if approved by the City.

5. Directional Signs: Directional signs, including traffic flow information relating to the pedestrians and vehicles within the PUD, shall conform to the standards of the City’s Sign Ordinance and be approved by the City. The signage design and materials shall be compatible with the building architecture.

6. Construction Sign” One sign denoting the name of the project, future tenants, the marketing agent, the contractor, architect and engineer shall be permitted on the site during construction.

7. Marketing Signs: A sign advertising the sale or lease of tenant space in the PUD may be permitted, but shall not exceed a maximum area of 32 square feet.

E. Sign Criteria

1. Freestanding Pylon Sign

   The freestanding pylon sign shall be designed to complement the forms and materials of the major/minor tenant entry elements. Tenant sign bands shall contain name of tenants in the font style and color of each tenant, sign panel color shall be consistent for all tenants. No electronic messages or animation. Double sided.

   Location: Along Highway 99 and West Stockton Blvd. Frontage

   Quantity: 1
<table>
<thead>
<tr>
<th>Lighting:</th>
<th>Projection lit from ground, project name and tenant names are internally illuminated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Sign Panel Height:</td>
<td>25' (frame) maximum excluding architectural embellishments.</td>
</tr>
<tr>
<td>Overall Sign Panel Width:</td>
<td>12' (frame) maximum excluding architectural Embellishments</td>
</tr>
<tr>
<td>Maximum Area:</td>
<td>200 s.f. each side (double face)</td>
</tr>
</tbody>
</table>

Artistic, architectural, or graphic embellishments may exceed the maximum sign panel width or height by a maximum of 20%.
2. Multi-Tenant Monument Signs

The monument signs shall be designed to complement the forms and materials of the major/minor tenant entry elements.

Locations: At driveway entrances and intersection of Bruceville Road and West Stockton Blvd

Quantity: 1 at each driveway and one at the corner of Bruceville and West Stockton Blvd

Lighting: Projection lit from ground with internal illumination.

Overall Sign Panel Height: Maximum 12 feet (sign panel) excluding architectural embellishments

Overall Sign Panel Width: Maximum 12 feet (sign panel) excluding architectural embellishments

Maximum Area: 150 s.f. each side (Signage face)

Artistic or architectural embellishments may exceed the maximum sign panel width or height up to 20%.

3. Project Monument Sign

The monument signs shall be designed to complement the forms and materials of the major/minor tenant entry elements.

Location: One at the intersection of Cosumnes River Blvd. and Bruceville Road.

Lighting: Projection lit from ground with internal illumination.

Overall Sign Panel Height: Maximum 20 feet (sign panel) excluding architectural embellishments

Overall Sign Panel Width: Maximum 15 feet (sign panel) excluding architectural embellishments

Maximum Area: 250 s.f. each side (Signage face)

Artistic or architectural embellishments may exceed the maximum sign panel width or height up to 20%.

4. Major Tenants Over 5000 s.f.

The major tenant signs shall be internally illuminated with dimensional letters and/or logo. Signs may be mounted directly to the building façade or to a freestanding metal framework or canopy in front of the tenant entrance.

Location: Major tenant entries along Retail Frontages

Quantity: 1 per building face; 1 each per tenant
5. Inline Shop Tenants

The shop tenant signage shall be internally illuminated dimensional letters and/or logo. Signs/logos may be mounted directly to the building façade or to a freestanding metal framework or canopy in front of the tenant’s entrance.

Location: Shop tenants along Retail Frontages under 5 000 sq ft.
Quantity: 2 each per tenant, 1 per facade, 3 signs in corner location
Lighting: Internally illuminated
Sign Area: 1.5’ maximum height letters/logo, length not to exceed 75% of lease width maximum, with an aggregate area not to exceed 1.5 square feet of each foot of building frontage. 300 square feet maximum aggregate area.

5. Pad Buildings

The pad buildings shall have internally illuminated dimensional letters and/or logo. Signs may be mounted directly to the building façade or to a freestanding metal framework or canopy in front of tenant’s entrance.

Location: Satellite pad buildings
Lighting: Internally illuminated

Single Tenant Sign Area: 3’ maximum height letters/logo, length not to exceed 80% of lease width maximum, with an aggregate area not to exceed 3 square feet of each foot of building frontage. 300 square feet maximum aggregate area.

Quantity: 4 maximum (1 per side)

Multi-Tenant Sign Area: 3’ maximum height letters/logo, length not to exceed 80% of lease width maximum, with an aggregate area not to exceed 3 square feet of each foot of building frontage. 300 square feet maximum aggregate area.

Quantity: 1 per tenant façade. 300 square feet maximum aggregate area.
6. Gas Station Pad

The gas station shall be an internally illuminated sign with dimensional letters and/or logo. Signs may be mounted directly to building or canopy façade.

Location: Gas station pad building façade, car wash façade, and fuel canopy façade

Lighting: Internally illuminated and legally required pricing signage

Building Sign Area: 3’ maximum height letters/logo

Quantity: 4’ maximum (1 per building façade)

Canopy Signs: 3’ maximum height letters/logo

Canopy Signage Quantity: 1 per canopy façade. Canopy and building signage not to exceed 24 square feet per sign.

7. Gas Station Pad Monument

The gas station pad monument sign shall be designed to compliment the forms and the materials of major tenant entry elements and other monument signs within the PUD.

Location: Set in landscaping in front of satellite pad

Lighting: Internally illuminated

Overall Height: 8’ maximum excluding architectural embellishments

Overall Width: 8’ maximum excluding architectural embellishments

Maximum Sign: 48 square feet maximum area per sign face

Quantity: 1 per tenant

8. Banners

Graphic banners may be incorporate to reinforce a unique sense of place and vehicular and pedestrian circulation routes. They may be constructed of canvas, nylon, metal, or other materials, and verbiage shall conform to city sign ordinance.

Location: Parking lot, driveway, or pedestrian light poles or building facades.

Lighting: Direct

Overall Height: 8’-0” maximum

Overall Width: 4’-0” maximum

Area: 24 square feet maximum

9. Office Building Signage
Office buildings shall be permitted up to two signs per building façade with no tenant having more than one sign per façade. Signage shall be internally lighted with a maximum height of 24". No tenant may have more than 50 sq. ft of signage per façade.

10. Residential Project Signage

Residential sign verbiage shall conform to city sign ordinance and be architecturally compatible in adjacent buildings.

SECTION VIII. ISSUANCE OF BUILDING PERMITS

No building permit shall be issued for any building, sign structure, or other land use in the PUD until the Planning Director has received the building permit application and has determined that said application conforms to a valid Special Permit issued for the PUD under this section.

SECTION IX. BUILDING OCCUPANCY

No building or structure within the PUD can be occupied until the Planning Director has determined that the applicant has complied with all conditions of the Special Permit.
Appendix B

Notice of Preparation (NOP)/Initial Study
DATE: December 17, 2002

TO: Interested Persons

FROM: Brad Shirhall, Associate Planner
Planning and Building Department

SUBJECT: NOTICE OF PREPARATION (NOP) FOR AN ENVIRONMENTAL IMPACT REPORT FOR THE COLLEGE SQUARE PLANNED UNIT DEVELOPMENT (APPLICATION NUMBER P00-147)

PUBLIC REVIEW PERIOD: The CEQA mandated 30-day response period for this NOP has been extended to 45 days (December 17, 2002 to January 30, 2003) in light of the document's release during the holiday period.

Introduction

The City of Sacramento Planning and Building Department will be the lead agency for the preparation of an Program Environmental Impact Report (EIR) for the proposed College Square Planned Unit Development (PUD) in the southern part of the City of Sacramento. Section 15082 of the California Environmental Quality Act (CEQA) states that after the decision to prepare an EIR has been made, the lead agency must prepare an NOP to inform all responsible agencies of that decision. The purpose of the NOP is to provide responsible agencies and interested persons with information on the proposed project and its potential environmental impacts that is sufficient to enable agencies and the public to make a meaningful response regarding the scope and content of the EIR.

The decision to prepare an EIR for the College Square PUD is based on the findings of an Initial Study prepared for the proposed project by the City of Sacramento. The Initial Study indicates that the proposed project could result in potentially significant environmental effects. A copy of the Initial Study is available upon request (see the last page of this NOP for further information).

Project Location

The project site is located within the southern part of the City of Sacramento (within the South Sacramento Community Plan area) as shown in Exhibits 1 and 2. The site consists of 63 gross acres of vacant land at the southeast corner of Cosumnes River Boulevard and Bruceville Road, and is identified as Assessor's Parcel.

NOP
EDAW

College Square PUD
December 11, 2002
Numbers: 117-0182-001, 003, 019, 020, 021, 024, 025, 028, 029, and 030, and 117-0184-001 and 002. Existing adjacent uses include vacant land, senior housing, and a residential tract to the north; vacant land and residential development to the south; State Route (SR 99) and an associated mitigation area (wetland) to the east; and Cosumnes River College to the west.

**Project Description**

The College Square project (proposed project) is a 63 gross acre mixed use residential, commercial and office project proposed at the southeast corner of Cosumnes River Boulevard and Bruceville Road in the South Sacramento Community Plan area of the City of Sacramento. The project would include a total of 724 multifamily residential units and 270,256 square feet of commercial, retail, and office uses on 53 net acres, with the balance of the project in major streets and drainage facilities (Exhibit 3). The project would include the following primary components:

1. **Residential:** The residential component would be comprised of 724 senior and multifamily residential units located on 22 net acres. These units would include 132 senior independent units, 120 senior assisted-living units, and 472 conventional multifamily units. Approximately 26 apartment buildings along with and ancillary buildings would be constructed. These buildings would range from one to two stories. The residential component would generate approximately 1,210 on-site residents.

2. **Commercial:** The commercial component would be comprised of 270,256 square feet of commercial uses on 31 net acres. This commercial space would include: approximately 157,500 square feet of local neighborhood retail center uses (i.e., coffee house, pharmacy, restaurants, gas station, car wash, retail, etc.) on 20 net acres; approximately 42,000 square feet of community commercial uses located on 4 net acres; and approximately 70,756 square feet of office; child care and retail uses located on 7 net acres. Approximately 27 commercial buildings (some attached) would be constructed. These buildings would range up to 45 feet in height. The commercial component would generate approximately 890 on-site employees.

The project would also include extension of West Stockton Boulevard through the project site to Bruceville Road, and would increase the width of Bruceville Road along the project site’s western frontage. The project would be located on vacant property designated for urban uses and surrounded by existing urban uses, and would represent infill development within the South Sacramento Community Plan area.

**Light Rail Alignment**

The City’s General Plan identifies, as a potential future track alignment for a south Sacramento light rail line, a future track segment located along the south side of Cosumnes River Boulevard between Bruceville Road and SR 99 in the northern portion of the project site. Further consideration of this alignment by the Sacramento Regional Transit District (RT) has been abandoned in favor of routing the tracks south down Bruceville Road, and turning east (south of the College Square project site), before crossing SR 99. As part of its South Sacramento Phase 2 Corridor Project study, RT will determine whether to route this Bruceville Road track alignment on the west side, the east side, or down the center median of Bruceville Road.

For purposes of cumulative “future year” analyses, the College Square EIR will assume only the west-side alignment of light rail transit along Bruceville Road. Discussions with RT and the City’s participation in RT’s planning process suggest that this is the more likely rail alignment of the three possible choices.
Project Objectives

It is the applicant’s intent that the proposed project provide the following benefits to the community:

1. Provide housing opportunities for residents of the City of Sacramento, especially seniors and lower-income residents;

2. Provide transit-oriented development (TOD) adjacent to light rail facilities currently being planned in the area by RT in order to reduce regional traffic congestion and increase utilization of the planned light rail facilities;

3. Provide services catering to students and faculty at Cosumnes River College; and

4. Provide a mix of on-site residential, commercial and office uses which compliment one another to reduce the traffic that would otherwise be generated by more traditional residential and commercial uses.

Required Entitlements

The land use entitlements being sought under the proposed project include the following:

- General Plan Amendment from Medium-Density Residential (16-29 du/ac) to Community/Neighborhood Commercial and Office, Medium Density Residential (16-29 du/ac), and High Density Residential (30+ du/ac).
- Community Plan Amendment from Special Planning District to Residential (11-29 du/ac), Residential (29+ du/ac), and General Commercial.
- Rezoning from HC-R, C-1, OB, and R-2B-R to SC-PUD.
- Adoption of College Square PUD Guidelines.
- Adoption of College Square Schematic Plan (Exhibit 3).
- Approval of the Tentative Parcel Map.
- Abandonment of excess City right-of-way adjacent to Cosumnes River College Boulevard/Bruceville Road

Environmental Effects

Based on the Initial Study, the City has determined that the proposed project could result in potentially significant impacts in terms of the following issues; therefore, these issues will be evaluated further in the EIR:

- Aesthetics (light and glare)
- Biological Resources
- Hazards & Hazardous Materials
- Utilities/Service Systems (Drainage, Water Supply, Solid Waste)
- Cultural Resources
- Hydrology/Water Quality
- Air Quality
- Noise
- Land Use/Planning
- Population/Housing
- Transportation/Traffic
- Public Services (Schools)
Based on the Initial Study, the City has determined that the project would result in less-than-significant impacts or no impacts in terms of the following issues; therefore, these issues will not be evaluated further in the EIR:

- Aesthetics (Visual Resources)
- Geology/Soils
- Mineral Resources
- Agriculture Resources
- Recreation
- Utilities/Service Systems (Wastewater, Water Facilities)
- Public Services (Fire, Police, Parks)

Alternatives

The City of Sacramento will evaluate the CEQA mandated “No Project” alternative and is considering the evaluation of the following two project alternatives in addition to the proposed project:

- **General Plan Buildout Alternative** - Under this alternative, the project site would be developed under the existing General Plan land use designation for the project site (i.e., Medium-Density Residential (16-29 du/ac), resulting in approximately 1,114 multifamily dwelling units but no commercial development.

- **Park and Ride Alternative** - Under this alternative, the project would be developed as proposed, except that a park and ride lot and bus transfer site serving a possible light rail station would be developed on 7.3 acres in the southwestern portion of the project site in place of 240 residential units under the proposed project.

Comments Requested

To ensure that the full range of issues related to this proposed project are addressed and that all significant issues are identified, written comments and suggestions are invited from all interested parties. Questions concerning the proposed EIR should be directed to the name and address below. A copy of the Initial Study is available at the address listed below. Written comments concerning the scope of the proposed EIR must be received at the following address by 5:00 p.m. on January 30, 2002:

Brad Shirhall, EIR Project Manager
City of Sacramento, Planning & Building Department
1231 I Street, Room 300
Sacramento, CA 95814

916/264-7483 (phone)  916/264-7185 (fax)

Public EIR Scoping Meeting

A public scoping meeting for this EIR will begin promptly at 6:30 p.m. and end no later than 8:00 p.m. on January 22, 2003, in the Samuel C. Pannell Meadowview Community Center located at 2450 Meadowview Road. Responsible Agencies and members of the public are invited to attend and provide input on the scope of the EIR.
CITY OF SACRAMENTO
DEPARTMENT OF NEIGHBORHOODS, PLANNING,
AND DEVELOPMENT SERVICES
PLANNING DIVISION

INITIAL STUDY
for the
COLLEGE SQUARE PLANNED UNIT DEVELOPMENT

This Initial Study has been required and prepared by the City of Sacramento Planning and Building Department, 1231 I Street, Room 300, Sacramento, CA 95814, pursuant to California Environmental Quality Act Guidelines, Section 15063.

I. BACKGROUND

1. File Number/Project Name: P00-147/College Square Planned Unit Development (PUD)

2. Project Location/APN(s): Southeast corner of Cosumnes River Boulevard and Bruceville Road /APNs 117-0182-001, 003, 019, 020, 021, 024, 025, 028, 029, 030 and 117-0184-001 and -002.

3. Applicant's Name, Address, Phone Number: Richard Sambucetti
Borges Architectural Group, Inc.
1512 Eureka Road, Suite 240
Roseville, CA 95661
(916) 782-7200

4. Project Planner's Name and Phone Number: Brad Shirhall, Associate Planner
(916) 264-7483

5. Date Environmental Checklist Completed: December 11, 2002
II. PROJECT LOCATION/DESCRIPTION

Project Location

The project site is located within the southern part of the City of Sacramento (within the South Sacramento Community Plan area) as shown in Exhibits 1 and 2. The site consists of 63 gross acres at the southeast corner of Cosumnes River Boulevard and Bruceville Road. The site is identified as Assessor’s Parcel Number(s) (APNs): 117-0182-001, 003, 019, 020, 021, 024, 025, 028, 029, 030, and 117-0184-001 and -002.

Existing Land Use

The project site is currently vacant land once used for agriculture. It is surrounded by:

1. **North:** Vacant land, senior citizen apartment complex, and a single-family residential subdivision
2. **South:** Vacant land and large-lot single-family residential
3. **East:** State Route 99 (SR 99)
4. **West:** Cosumnes River College

The existing City of Sacramento General Plan land use designation for the project site is Medium-Density Residential (16–29 du/ac). The existing South Sacramento Community Plan land use designation is Special Planning District.¹

The existing zoning designations for the project site are:

- OB (Office)
- C-1 (Limited Commercial)
- HC-R (Highway Commercial Review)²
- R-2B-R (Multifamily Review)

Requested Entitlements

The requested land use entitlements for the proposed project are:

- General Plan Amendment from Medium Density Residential (16–29 du/ac) to Community/Neighborhood Commercial and Office, Medium Density Residential (16–29 du/ac), and High Density Residential (30+ du/ac).

¹ Special Planning Districts allow the City Planning Commission and City Council to initiate proceedings to regulate properties under multiple ownership, designated in redevelopment, community, or general plans, that are in need of general physical and economic improvement, or have special environmental features that land use, zoning and other regulations cannot adequately address. For such areas to achieve their fullest potential, it may be desirable to provide for a range of uses that would not otherwise be permitted with standard zoning designations, and/or to encourage coordinated development of multiple properties.

² “R Review” is an overlay designation applied to require review of all issues other than land use. The intent of this overlay is to ensure that quality design is incorporated into multifamily residential development, and/or that consistent design is incorporated over an area covered by multiple properties/projects.
Local Setting

College Square PUD
11157.01 3/02

Source: California State Automobile Association, Greater Sacramento Southern Area 1997

EXHIBIT 2
• Community Plan Amendment from Special Planning District to Residential (11–29 du/ac), Residential (29+ du/ac), and General Commercial.
• Rezoning from HC-R, C-1, OB, and R-2B-R to C2-PUD
• Adoption of the College Square PUD Guidelines
• Adoption of the College Square Schematic Plan (Exhibit 3)
• Approval of the Tentative Parcel Map
• Abandonment of excess City right-of-way adjacent to Cosumnes River Boulevard/Bruceville Road

After PUD approval, individual component of the project will still be subject to special permit requirements and associated environmental reviews by the City.

Project Characteristics

The College Square project (proposed project) is a 63-gross-acre mixed-use residential, commercial and office project proposed at the southeast corner of Cosumnes River Boulevard and Bruceville Road in the South Sacramento Community Plan area of the City of Sacramento. The project would include a total of 724 multifamily residential units and 270,256 square feet of commercial/retail/office uses on 53 net acres, with the balance of the project in major streets and drainage facilities (Exhibit 3). The project would include the following primary components:

1. **Residential:** The residential component would be comprised of 724 senior and multifamily residential units located on 22 net acres. These units would include 132 senior independent units, 120 senior assisted-living units, and 472 conventional multifamily units. Approximately 26 apartment buildings (including two apartment office buildings) and ancillary buildings would be constructed. These buildings would range from one to two stories. The residential component would generate approximately 1,210\(^3\) on-site residents.

2. **Commercial:** The commercial component would be comprised of 270,256 square feet of commercial uses on 31 net acres. This commercial space would include: approximately 157,500 square feet of local neighborhood retail center uses (i.e., coffee house, pharmacy, restaurants, gas station, car wash, retail) on 20 net acres; approximately 42,000 square feet of community commercial uses located on 4 net acres; and approximately 70,756 square feet of office; child care and retail uses located on 7 net acres. Approximately 26 commercial buildings (some attached) would be constructed. These buildings would range up to 45 feet in height. The commercial component would generate approximately 890\(^4\) on-site employees.

The project would also include extension of West Stockton Boulevard through the project site to Bruceville Road, and would increase the width of Bruceville Road along the project site’s western frontage.

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\(^3\) Based on 1.67 persons per multifamily dwelling unit from the R Street Corridor DEIR, page 6.2-6 (July 1995).

\(^4\) Based on an employee generation rate of 3.3 employees per 1,000 square feet of C-2 general commercial development from Section 17.184.050 of the City of Sacramento Zoning Ordinance.
Project Objectives

The primary objectives of the proposed project are:

1. Provide housing opportunities for residents of the City of Sacramento, especially seniors and lower-income residents;

2. Provide transit-oriented development (TOD) adjacent to light rail facilities currently being planned in the area by the Sacramento Regional Transit District (RT) as part of the South Sacramento Phase 2 Corridor Project; and

3. Provide services catering to students and faculty at Cosumnes River College, and provide a mix of on-site residential, commercial and office uses that compliment one another, in order to reduce the traffic that would be generated by development of the project site under more traditional residential/commercial development.

Light Rail Alignment

The City’s General Plan identifies, as a potential future track alignment for a south Sacramento light rail line, a future track segment located along the south side of Cosumnes River Boulevard between Bruceville Road and SR 99 in the northern portion of the project site. Further consideration of this alignment by the Sacramento Regional Transit District (RT) has been abandoned in favor of routing the tracks south down Bruceville Road, and turning east (south of the College Square project site), before crossing SR 99. As part of its South Sacramento Phase 2 Corridor Project study, RT will determine whether to route this Bruceville Road track alignment on the west side, the east side, or down the center median of Bruceville Road.

For purposes of cumulative “future year” analyses, the College Square EIR will assume only the west-side alignment of light rail transit along Bruceville Road. Discussions with RT and the City’s participation in RT’s planning process suggest that this is the more likely rail alignment of the three possible choices.

Adjacent Land Use Designations

The adjacent vacant properties to the north, south and east are currently designated by the General Plan land use map as Community/Neighborhood Commercial & Offices, Low Density Residential, and Schools/Transit, respectively. The adjacent vacant property to the northeast, between the project site and SR 99, is designated as Medium Density Residential, but is a wetland mitigation area associated with the SR 99/Calvine Road interchange and thus is not subject to future development. There is no vacant property adjacent to the project site directly east (i.e., location of SR 99 right-of-way).
III. ENVIRONMENTAL DETERMINATION SUMMARY

Determination to Prepare an EIR

The analysis contained in this Initial Study concludes that implementation of the proposed project could result in potentially significant environmental impacts, or less-than-significant environmental impacts after incorporation of mitigation, in the following issue areas:

- Aesthetics (light and glare)
- Biological Resources
- Hazards & Hazardous Materials
- Utilities/Service Systems (Drainage, water supply, solid waste)
- Cultural Resources
- Hydrology/Water Quality
- Air Quality
- Noise
- Land Use/Planning
- Population/Housing
- Transportation/Traffic
- Public Services (schools)

At the same time, the analysis in the Initial Study concludes that implementation of the proposed project would result in no environmental impacts, or less-than-significant environmental impacts, in the following issue areas:

- Aesthetics (Visual Resources)
- Geology/Soils
- Mineral Resources
- Agriculture Resources
- Recreation
- Utilities/Service Systems (Wastewater, Water Facilities)
- Public Services (Fire, Police, Parks)

Based on the analysis in the Initial Study, it is determined that the proposed project could result in potentially significant environmental impacts, and therefore an EIR will be prepared.

Scope of the EIR

The EIR will evaluate the potential environmental impacts of the College Square project in each of the environmental issue areas identified in the first of the two lists above. Consistent with CEQA requirements, the EIR will also include an evaluation of the CEQA-mandated issues (i.e., cumulative impacts, significant unavoidable adverse impacts, growth-inducing impacts, irreversible/irretrievable commitment of resources, and alternatives), and will identify feasible mitigation measures required to reduce or avoid any identified significant impacts.

The EIR to be prepared will be a Program EIR as defined by §15168 of the State CEQA Guidelines. A program EIR is an EIR that is prepared on a series of actions that can be characterized as one large project.
and are related as logical parts in a chain of contemplated actions. Subsequent activities in the program must be examined in the light of the program EIR to determine whether additional environmental review is required. In the case of College Square, the PUD and other requested entitlements, (e.g., GPA, Rezone) represent the initial program, and special permits required from the City to develop the individual components of the PUD will represent the subsequent activities. When special permits are sought by the project applicant to develop individual components of the PUD, the City will review each special permit for consistency with the PUD. At part of that review, the City will prepare an Initial Study to determine whether additional significant impacts not evaluated in the program EIR will occur. If no additional significant impacts will occur, no additional CEQA review would be required. If additional significant impacts could potentially occur, additional CEQA review would be conducted (i.e., project-level Negative Declaration, Mitigated Negative Declaration, or EIR of that specific project component).

The scope of the EIR may be revised following receipt and review of comments received on the Notice of Preparation (NOP) and Initial Study.

Alternatives to be Evaluated in the EIR

The guiding principals for the selection of alternatives for analysis in an EIR are provided by the State CEQA Guidelines (§15126.6). Section 15126.6 of the Guidelines indicates that the alternatives analysis must: (1) describe a range of reasonable alternatives to the project that could feasibly attain the basic objectives of the project; (2) consider alternatives that could reduce or eliminate any significant environmental impacts of the proposed project; and (3) include evaluation of a “No Project Alternative.” The focus and definition of the alternatives is governed by the “rule of reason” in accordance with §15126.6(f) of the guidelines. That is, the range of alternatives presented in an EIR must permit a reasoned choice by the decision-makers.

The City of Sacramento will evaluate the CEQA mandated “No Project” alternative and is considering the evaluation of the following two project alternatives in addition to the proposed project:

- **General Plan Buildout Alternative** - Under this alternative, the project site would be developed under the existing General Plan land use designation for the project site (i.e., Medium-Density Residential (16–29 du/ac), resulting in approximately 1,114\(^5\) multifamily dwelling units, but no commercial development.

- **Park and Ride Alternative** - Under this alternative, the project would be developed as proposed, except that a park-and-ride lot and bus transfer site serving a possible light rail station would be developed on 7.3 acres in the southwestern portion of the project site in place of 240 residential units under the proposed project.

\(^5\) The 1,114 residential unit figure was derived based on multiplying 22 du/ac by 50.63 net acres. The 22 du/ac density figure is used as it represents the midpoint between the 16 and 29 du/ac permitted at the project site under the existing Medium Density Residential General Plan land use designation of the site. The 50.63 net acres was derived by taking 80% of the project site’s gross acreage of 63.29 acres. This unit figure represents a realistic estimate of the development that would occur at the project site under the existing General Plan.
IV. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- Aesthetics
- Biological Resources
- Hazards & Hazardous Materials
- Mineral Resources
- Public Services
- Utilities/Service Systems
- Agriculture Resources
- Cultural Resources
- Hydrology/Water Quality
- Noise
- Recreation
- Mandatory Findings of Significance
- Air Quality
- Geology/Soils
- Land Use/Planning
- Population/Housing
- Transportation/Traffic
V. DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

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

______________________________
Signature

Brad Shirhall
Printed Name

12-13-02
Date

For

Initial Study
EDAW

College Square PUD
December 11, 2002
VI. ENVIRONMENTAL CHECKLIST

For this checklist, the following designations are used:

*Potentially Significant Impact:* An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

*Less than Significant With Mitigation Incorporated:* An impact that requires mitigation which is readily identifiable now to reduce the impact to a less-than-significant level.

*Less-than-Significant Impact:* Any impact that would not be considered under CEQA relative to existing standards.

*No Impact:* The project would not have any impact.

Checklist items determined to be “potentially significant” or “less than significant with mitigation incorporated” will be evaluated in the EIR.
## Environmental Checklist

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<thead>
<tr>
<th>Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>Less-Than-Significant Impact</th>
<th>No Impact</th>
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### 1. LAND USE AND PLANNING.

**Would the project:**

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<tr>
<td>a. Physically divide an established community?</td>
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<td>b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>■</td>
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<tr>
<td>c. Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
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**Discussion**

a. The proposed project would represent infill development within an existing urban area. No public roadways\(^6\), bicycle routes, or pedestrian paths are located on the project site. Development of the proposed project would not disrupt or divide the physical arrangement of an established community. In fact, the project would increase connectivity as it would include the extension of West Stockton Boulevard to Bruceville Road. Therefore, no impact would occur.

b. The proposed project would include a General Plan Amendment from Medium-Density Residential (16–29 du/ac) to Community/Neighborhood Commercial and Office, Medium-Density Residential (16–29 du/ac) and High-Density Residential (29+ du/ac), a Community Plan Amendment from Special Planning District to Residential (11–29 du/ac), Residential (29+ du/ac) and General Commercial, and a Rezone from HC-R, C-1, OB, and R-2B-R to C2-PUD. Therefore, the proposed project would change the existing land use planning and zoning of the project site. The EIR will address whether the proposed project would conflict with any land use plan, policy, or regulation of the City (including the General Plan, South Sacramento Community Plan, and Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

c. The project site is not subject to an adopted habitat conservation plan or natural community conservation plan. However, the project site is located within the vicinity of a wetlands mitigation bank located at the southwest corner of the Cosumnes River Boulevard/SR 99 intersection. This mitigation bank was established as part of the Cosumnes River Boulevard/Calvine Road Interchange Improvement Project. This mitigation bank would potentially be affected by the proposed project. Any such effect would represent a potentially significant impact. This potential impact will be evaluated in the EIR.

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\(^6\) The project site is partially bisected by Kastanis Way, but this existing roadway dead-ends on-site, and does not provide access through the project site.
2. AGRICULTURE RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program in the California Resources Agency, to non-agricultural use? □ □ □ ■

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? □ □ □ ■

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? □ □ □ ■

Discussion

a. The project site is located at the southeast corner of Bruceville Road and Cosumnes River Boulevard and is surrounded by urban development. The site is not designated by the Important Farmland Inventory of California as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, no impact would occur.

b. The project site is not zoned for agricultural use nor is it included under a Williamson Act contract. The site has been designated for urban development in the City's General Plan adopted in 1987. Therefore, no impact would occur.

c. The California Department of Conservation, Farmland Mapping and Monitoring Program, Farmland Inventory lists the project site as being "Farmland of Local Importance." Farmland of Local Importance is defined differently in each county. In Sacramento County, Farmland of Local Importance is defined as:

"Lands which do not qualify as Prime, Statewide, or Unique designation, but are currently irrigated crops or pasture or nonirrigated crops; lands that would be Prime or Statewide designation and have been improved for


8 Ibid.
irrigation but are now idle; and lands which currently support confined livestock, poultry operations, and aquaculture."

The project site has not been improved for irrigation. In addition, although it would appear that the site was once used to support agriculture, the site is not currently farmed and has been idle for many years. Therefore, the proposed project would not result in the conversion of existing agricultural land to urban uses, and no impact would occur.
### Environmental Checklist

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<thead>
<tr>
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<td>3.</td>
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<td>POPULATION AND HOUSING. Would the project:</td>
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<tr>
<td>a.</td>
<td>Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?</td>
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<td>b.</td>
<td>Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</td>
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<td>c.</td>
<td>Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
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**Discussion**

a. The proposed project would represent infill development and would not extend roads or infrastructure to new areas not already served by such roads or infrastructure. Hence, the proposed project would not induce substantial population growth indirectly. However, the project would include the development of 724 residential units. The development of these residential units could potentially result in the direct inducement of substantial population growth in the South Sacramento Community Plan area. Any such inducement of population growth would represent a potentially significant impact and will be evaluated in the EIR.

b,c. The project site is a fallow field and does not contain any existing housing. Therefore, the proposed project would not displace substantial numbers of existing housing units or require the construction of replacement housing. Thus no impact would occur.

Portions of the project site currently designated by the City of Sacramento General Plan for Medium Density Residential (16–29 du/ac) would be re-designated to Community/Neighborhood Commercial and Office under the proposed project, thus potentially displacing future potential housing. Furthermore, at one time the City contemplated the development of several hundred units of low-income housing on a portion of the project site. Because the proposed project would result in the development of less housing at the project site (i.e., 724 units) than is permitted under the existing General Plan land use designation of the site (i.e., 1,114 units\(^9\)), the issue of the potential displacement of future housing (especially low-income housing) will be evaluated in the EIR.

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\(^9\) The 1,114 residential unit figure was derived based on multiplying 22 du/ac by 50.63 net acres. The 22 du/ac density figure is used as it represents the midpoint between the 16 and 29 du/ac permitted at the project site under the existing Medium Density Residential General Plan land use designation of the site. The 50.63 net acres was derived by taking 80% of the project site’s gross acreage of 63.29 acres. This unit figure represents a realistic estimate of the development that would occur at the project site under the existing General Plan.
### 4. GEOLOGY AND SOILS.

#### Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist - Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii. Strong seismic ground shaking?

iii. Seismic-related ground failure, including liquefaction?

iv. Landslides?

b. Result in substantial soil erosion, or the loss of topsoil?

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

d. Be located on expansive soils, as defined in Table 18-1-13 of the Uniform Building Code (1994), creating substantial risks to life or property?

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

#### Discussion

a.i. The project site is not located within, on, in, or within the vicinity of an Alquist-Priolo Earthquake Fault Zone as delineated by the California Division of Mines and Geology.\(^\text{10}\) Hence, the proposed project would not be subject to fault rupture, and no impact would occur.

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\(^{10}\) Dale Stieckey, California Department of Conservation, Division of Mines & Geology, pers. com. with Craig Cross of EDAW, October 23, 2003.
a.ii-iii. The project site is not located within an official or preliminary official seismic Hazard Zone area as delineated by the California Division of Mines and Geology. Based on the California Division of Mines and Geology’s preliminary map of maximum expected earthquake intensity in California, the City of Sacramento, including the project site, is located in Seismic Risk Zone I. The severity of nearby earthquakes in this zone is considered low, and the associated damage considered minor to moderate. There are no active or potentially active faults known to occur near the project site. The closest known active fault is the Dunnigan Hills fault, located approximately 29 miles northwest of the City of Sacramento.

The State of California provides minimum standards for building design through the California Building Standards Code (California Code of Regulations (CCR), Title 24). The California Uniform Building Code (UBC) is based on the federal UBC used widely throughout the U.S., and has been modified for California conditions with more detailed and stringent regulations. Specific minimum seismic safety requirements are set forth in Chapter 23 of the California UBC. The State earthquake protection law (California Health and Safety Code 191000 et seq.) requires that buildings be designed to resist stresses produced by lateral forces caused by earthquakes. Because the City implements the requirements of the California UBC through its building permit process, the project would be required to comply with State seismic safety design requirements. Earthquake-resistant design and materials are required to meet or exceed the current seismic engineering standards of the California UBC Seismic Risk Zone 3 improvements. Because the proposed project would be required to adhere to these construction standards, and because these standards would provide seismic protection in exceedance of the low seismic risk at the project site as indicated by its Seismic Risk Zone 1 designation, a less-than-significant seismic impact would occur.

In order for liquefaction to occur, several conditions need to be present including the potential for strong ground shaking, shallow groundwater and/or saturated soils, and soils/sediments composed of unconsolidated and clay-free sands and silts. As indicated above, the project site is located within an area with low seismic potential. The most prevalent soils in the area (and its corresponding United States Soil Conservation Service mapping unit number) are of the San Joaquin-Galt complex (103), San Joaquin silt loam (100) and Galt Clays (110 and 112), none of which are composed of unconsolidated clay-free sands or silts. Hence, seismic and soil conditions in the area are not conducive to liquefaction. In addition, the City’s General Plan does not identify the South Sacramento area as an area especially subject to a liquefaction hazard. Finally, consistent with standard engineering practice, the City of Sacramento Building Department will require a site-specific soils/geology investigation for the proposed project to identify specific foundation, footing, and

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11 Ibid.

12 City of Sacramento, Cosumnes River Boulevard/Calvine Road Interchange Draft EIR, September 1992

13 Ibid.


15 City of Sacramento General Plan, Section 8-6, Map 3; Ground Deformation Areas of Sacramento (areas of unconsolidated water saturated alluvium), adopted January 19, 1988.
other building requirements for the specific geologic and soils conditions at the project site.\textsuperscript{16} Therefore, a \textit{less-than-significant impact} would occur.

a-iv. The project site is relatively flat and thus landslide hazard conditions do not exist. Furthermore, no evidence of landslide activity on or adjacent to the project site was observed during a field visit by the environmental consultant in February 2002. Therefore, \textit{no impact} would occur.

b. Construction of the proposed project would require relatively shallow excavations, but at the same time would require grading and compaction over the majority of the 63-acre project site. This could cause erosion during the construction period. Title 15, Chapter 15.88 of the City’s Municipal Code requires that a grading permit be obtained prior to construction activities. In accordance with the grading permit requirements, the applicant will be required to submit an Erosion and Sediment Control plan to reduce the amount of erosion and retain sediment on the project site.\textsuperscript{17} For these reasons, the proposed project would not result in substantial soil erosion or loss of topsoil and geotechnical impacts related to erosion. Thus, a \textit{less-than-significant impact} would occur.

c. The proposed project would have to comply with the latest City-adopted code, including the UBC, which requires construction and design of buildings to meet standards that would reduce risks associated with subsidence or liquefaction. Because the topography of the area is relatively flat, landslides do not present a hazard in the project area. The site does not contain clay-free sandy or silty soil types (see Response 4a-ii-iii above) conducive to liquefaction, lateral-spreading, subsidence, expansion or collapse. The City’s General Plan does not identify the South Sacramento area as an area especially subject to a liquefaction hazard, and indicates that the Sacramento area has a low expansiveness rating for soils.\textsuperscript{18} Also, consistent with standard engineering practice, the City of Sacramento Building Department will require a site-specific soils/geology investigation for the proposed project to identify specific foundation, footing, and other building requirements for the specific geologic and soils conditions at the project site. With implementation of this requirement, and given the low seismic hazard, lack of elevation differential, and low liquefaction and expansiveness potential, a \textit{less-than-significant impact} would occur.

d. Compliance with UBC requirements and standards as discussed in Response a.ii-iii, and following the geotechnical recommendations of the site-specific soils/geology investigation required for the project as discussed in Response c would result in \textit{less-than-significant impact} associated with shrink-swell.

e. The project would not involve the use of septic systems or alternative wastewater disposal systems. Therefore, \textit{no impact} would occur.

\textsuperscript{16} The City of Sacramento Building Department (Joe Nicholas, pers. com., October 23, 2002) has indicated that the Department requests applicants to provide a site-specific soils/geology investigation in cases where proposed construction has not been designed to a soil bearing pressure of at least 1,000 psf (the California UBC requirement). The California UBC soil bearing pressure requirement of 1,000 psf is designed to provide for safe construction given the soil and geology characteristics in the state.

\textsuperscript{17} City of Sacramento. http://ordlink.com/codes/sacramento/index.htm

\textsuperscript{18} City of Sacramento General Plan, Section 8-6, Map 3, Ground Deformation Areas of Sacramento (areas of unconsolidated water saturated alluvium), and Map 4, Expansive Soils in California, adopted January 19, 1988.
## HYDROLOGY AND WATER QUALITY

*Would the project:

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<td>a. Violate any water quality standards or waste discharge requirements?</td>
<td>■</td>
<td>□</td>
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<tr>
<td>b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (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)?</td>
<td>□</td>
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<tr>
<td>c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</td>
<td>■</td>
<td>□</td>
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<tr>
<td>d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</td>
<td>■</td>
<td>□</td>
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<tr>
<td>e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</td>
<td>■</td>
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<tr>
<td>f. Otherwise substantially degrade water quality?</td>
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<tr>
<td>g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</td>
<td>□</td>
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<tr>
<td>h. Place within a 100-year floodplain structures which would impede or redirect flood flows?</td>
<td>□</td>
<td>□</td>
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<td>■</td>
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<tr>
<td>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?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>■</td>
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<tr>
<td>j. Inundation by seiche, tsunami, or mudflow?</td>
<td>□</td>
<td>□</td>
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Discussion

a. Development of the proposed project would result in earth-disturbing activities over most of the 63-acre project site, and the development of impervious surfaces over approximately 82% of the site. Project construction activities would create the potential for an increase in erosion and sedimentation associated with stormwater runoff from on-site construction. Project operation would include the deposition of pollutants onto impervious surfaces such as parking lots and roadways (associated with motor vehicles), which could be carried off the site by stormwater runoff. Thus, project operation could result in construction and operations-related pollution in stormwater runoff and potentially affect the quality of surface water.

The City’s Grading, Erosion and Sediment Control Ordinance (No. 93-068) requires the project applicant to prepare erosion, sediment and pollution control plans for activities occurring during and after construction. The project applicant is also required to prepare preliminary and final grading plans demonstrating how the project would reduce the potential for contaminants to enter receiving waters, adversely affecting water quality. Best Management Practices (BMPs) to be followed during project construction must be approved by the City’s Department of Utilities. Construction BMPs can include, but are not limited to, storm water inlet protection, including the use of straw bales, sandbags, gravel traps and filters; erosion control measures such as vegetation and physical stabilization; and sediment control measures that include fences, dams, barriers, berms, traps, and basins. The proposed project must be evaluated for its consistency with the above. Lack of consistency with the above could result in exceedance or violation of adopted water quality standards during construction, which would be a potentially significant impact. The consistency of the proposed project with the above, and the potential for the project to violate water quality standards or waste discharge requirements, will be evaluated in the EIR.

After the project is constructed and is operating, because of paving, the proposed gas station and car wash, and the presence of automobiles traveling through the site, the project site is expected to contain some urban pollutants such as oil, grease, metals, and sediment. The proposed project includes vegetated swales to trap stormwater pollutants and divert stormwater runoff away from the wetland preservation area. It is anticipated that these swales would help reduce the amount of urban pollutants in stormwater runoff from the project site. However, the proposed project must be evaluated for its consistency with the City’s Grading, Erosion and Sediment Control Ordinance and with the standard set of BMPs required of projects of this type by the City’s Department of Utilities. Lack of consistency with the above could result in exceedance or violation of adopted water quality standards during operation, which would be a potentially significant impact. This consistency of the proposed project with the above, and the potential for the project to violate water quality standards or waste discharge requirements, will be evaluated in the EIR.

b. The project does not include proposals for wells or the use of groundwater; water for the project would come from the City’s municipal supplies that originate primarily from surface waters (see Response 13a and 13c). The development of impervious surfaces on the project site would not be of a scale (approximately 82% of 63 acres = 52 acres) that could interfere substantially with groundwater recharge within the many-thousand-square-mile Central Valley groundwater basin or the 180-square-mile Morrison Creek Stream Group drainage sub-basin. Furthermore, development of the site with urban uses was considered in the General Plan and the cumulative impacts to groundwater associated with development in the City were evaluated in the EIR for the General Plan. In addition, stormwater runoff from the project site would not be eliminated, but rather would
be conveyed to a proposed drain in Bruceville Road, which in turn would drain to an existing 7'x6' box drain in Cosumnes River Boulevard.\textsuperscript{19} This existing box drain has a natural bottom that allows for continued percolation of stormwater to the groundwater table. Finally, there are no wells in the immediate vicinity of the project site that could potentially be affected by development of the proposed project. Therefore, a \textit{less-than-significant impact} would occur.

c,d. There are no rivers or streams on the project site. Therefore, the proposed project would not have the potential to cause substantial erosion, siltation, or flooding associated with the alteration of the course of a stream or river.

The proposed project would alter the existing drainage pattern of the project site, which could potentially result in erosion, siltation, and/or flooding on- and off-site. The proposed project includes a drainage plan that is meant to be consistent with the Jacinto Creek Drainage Master Plan (a City-adopted drainage plan for the 500-acre Jacinto Creek Planning Area watershed, which drains naturally into Strawberry, Jacinto, and Laguna creeks).\textsuperscript{20} However, the proposed project must be evaluated for its consistency with this Master Plan, and also for its consistency with the City’s Grading, Erosion and Sediment Control Ordinance (Response 5a). Lack of consistency with the above could result in substantial erosion, siltation, and/or flooding on- and off-site, which would represent a \textit{potentially significant impact}. The consistency of the proposed project with the above, and the potential erosion, siltation, and flooding impacts of the project, will be evaluated in the EIR.

e,f. The City of Sacramento published the Jacinto Creek Planning Area Drainage Master Plan report in 1996.\textsuperscript{21} The Master Plan divides the Jacinto Creek planning area into several watersheds. The project site is located in Watershed 1, a 117.5-acre area bounded by Cosumnes River Boulevard on the north, Shasta Avenue on the south, Bruceville Road on the west, and SR 99 on the east.

As an input to planning for the future needs of the drainage area, the Master Drainage Plan made several observations/assumptions concerning Watershed 1: (1) the current stormwater drainage facilities were undersized and could not adequately convey runoff under buildout conditions; (2) Watershed 1 would be built out in accordance with its current zoning (i.e., multifamily residential with approximately 70\% impervious surfaces); and (3) drainage infrastructure planning under the Master Plan is based on buildout under the current zoning.

Under the proposed project, approximately 82\% of the project site would be developed with impervious surfaces (i.e., buildings, roads, parking lots). This amount of impervious coverage would exceed that used as a basis for drainage infrastructure planning under the Master Plan, and thus the proposed project could potentially result in runoff quantities that exceed the capacity of existing and planned drainage facilities in Watershed 1. In addition, as discussed under Response 5a, project construction activities and operations would have the potential to generate runoff from the project.

\textsuperscript{19} Ensign & Buckley Consulting Engineers, Jacinto Creek Planning Area Drainage Master Plan Report, Figure 4, April 15, 1996.

\textsuperscript{20} Ibid, page 5.

\textsuperscript{21} Ensign & Buckley Consulting Engineers, Jacinto Creek Planning Area - Drainage Master Plan Report, April 15, 1996.
site, which could degrade surface water quality. These conditions would represent potentially significant impacts and will be evaluated in the EIR.

The project site is not located within a 100-year flood hazard area. The northern portion of the project site is located within the 500-year floodplain, while the southern portion is split between the 500-year floodplain and the No Flood Zone. Therefore, there is no potential for housing or other structures to be placed within a 100-year flood hazard area, redirect 100-year storm flows, or expose persons to 100-year flood hazards on this site. While the project site is located downstream of Folsom Dam, the site lies 23 miles from the dam and would not be expected to be inundated by any potential dam failure. No impact would occur.

The project site is not located near a surface water body in which a seiche or tsunami could directly or indirectly affect the site, nor is the project site located near a volcano. Therefore, no impact would occur.

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22 FEMA Q# Flood Data, 1996.
6. **AIR QUALITY.**

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations:

Would the project:

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<th>Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<td>e.</td>
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**Discussion**

a. The emissions inventories used for development of the region’s air quality attainment plans are based primarily on projected population growth and vehicle miles traveled (VMT) for the region, which are based in part, on the planned growth identified in regional and community plans. Therefore, projects that would result in increases in population or employment growth beyond that projected in regional or community plans could result in increases in VMT, further resulting in increases in mobile source emissions that could conflict with the region’s air quality planning efforts. Increases in VMT beyond that projected in area plans would be generally considered to have a significant adverse incremental effect on the region’s ability to attain and/or maintain state and federal ambient air quality standards.

The College Square project includes a General Plan Amendment (GPA) that would change the amount of development projected for the site under the General Plan. This change could potentially be inconsistent with the population growth and VMT projections for the Sacramento Valley Air Basin contained in the Sacramento Metropolitan Air Quality Management District’s Air Quality Management Plan (which is based on General Plan projections), and thus could potentially interfere with the region’s ability to attain/maintain state and federal ambient air quality standards (a potentially significant impact). This will be evaluated in the EIR.

It should be noted that, while the proposed project may not be consistent with the planned growth identified in regional and community plans, it is unclear whether this inconsistency would result in an
increase in VMT beyond that predicted. Under the proposed project, 724 residential units and 270,256 square feet of commercial and office uses would be developed. This is compared to 1,114 residential units and no commercial development that could be developed at the project site under the existing Medium Density Residential General Plan land use designation of the site. Furthermore, mixed-use TOD development is proposed under the College Square project with the intent of both encouraging mass transit usage and reducing potential off-site trips, thus reducing VMT from that which would otherwise occur with more traditional development. Hence, the air quality (and traffic) evaluation in the EIR will include a comparison of the VMT to be generated under the proposed project with that which would be generated under buildout of the project site under the existing General Plan.

b. Short-term Increases in Regional Emissions

Emissions produced during site preparation and construction are “short-term” because they occur only during the construction phase of the project. Dust generation is normally the primary concern during initial site preparation. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions.” Fugitive dust emissions typically include emissions from on-site grading and excavation activities and from off-site truck and passenger car travel on unpaved roadways. Fugitive dust emission rates vary as a function of many parameters (e.g., soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, vehicle miles traveled). Emissions of reactive organic gases (ROG) and nitrogen oxides (NOₓ) are generated primarily by the operation of gasoline- and diesel-powered motor vehicles. Construction-generated emissions vary from day to day, depending on the specific activities being conducted, the type of equipment, duration of equipment use, and number of transport trips for people and material.

As previously discussed, actual pollutant concentrations would depend on various factors, including the location and type of activities performed, meteorological conditions, distances to nearby receptors, and the effectiveness of the mitigation measures employed. The proposed project includes construction activities that could result in short-term increases in regional pollutants that could adversely affect nearby sensitive receptors, violate air quality standards, and/or contribute to existing air quality violations. Therefore, a potentially significant impact could occur. This impact will be evaluated in the EIR.

Long-term Increases in Regional Emissions

Long-term increases in regional emissions of criteria pollutants would be primarily due to motor vehicle operations associated with the proposed land uses. Other increases in regional emissions would be associated with the operation of area and stationary sources of emissions, such as the use of landscape maintenance equipment, natural gas-fired appliances, and consumer products (e.g., cleaners and solvents). Long-term increases in mobile, stationary, and area source emissions could potentially exceed the recommended thresholds identified by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and would, therefore, be considered a potentially significant impact. Potential long-term increases in regional pollutants will be further evaluated in the EIR.

c. Sacramento is currently designated a nonattainment area for the state and national ozone and PM₁₀ (particulate matter of 10 microns in size or less) standards. However, because Sacramento County now meets the national PM₁₀ standard, California Air Resources Board (CARB) has recommended
redesignation of Sacramento as attainment for the national PM$_{10}$ standard. In July 1997, the U. S. Environmental Protection Agency (U.S. EPA) also adopted a new national ambient air quality standard for finer particulate matter, particulate matter of 2.5 microns or less in diameter (PM$_{2.5}$), to be used in conjunction with the national PM$_{10}$ standard. To date, no attainment status designations have been adopted for the national PM$_{2.5}$ standards.

The proposed project may result in potential short-term and long-term increases in regional criteria pollutants. Increases in project-generated emissions may result in a cumulatively considerable net increase of criteria pollutants for which the region is designated nonattainment. As a result, this impact is considered potentially significant and will be further evaluated in the EIR.

d. One of the most important reasons for air quality regulations and standards is the protection of those members of the population who are most sensitive to the adverse health effects of air pollution, termed “sensitive receptors.” The term sensitive receptors refers both to specific population groups and the land uses where they would reside for long periods. Commonly identified sensitive population groups are children, the elderly, the acutely ill, and the chronically ill. Commonly identified sensitive land uses are residences, schools, playgrounds, childcare centers, retirement or convalescent homes, hospitals, and clinics.

The proposed project may result in potential short-term and long-term increases in mobile, stationary, and area source emissions, which could result in substantial increases in pollutant concentrations at both on-site (i.e., child care, apartments, and senior housing) and nearby off-site sensitive receptors (i.e., residential uses to the northwest and south, senior uses to the north, school uses to the west). As a result, this impact is considered potentially significant and will be further evaluated in the EIR.

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

Short-term increases in emissions of diesel exhaust and fuel vapors from on-site construction equipment may be considered to be an objectionable odor by some individuals. Emissions from such sources would occur on a temporary and intermittent basis, and would likely be limited to daytime hours of operation. Long-term increases in odorous emissions could potentially occur, associated with the operation of on-site stationary sources of emissions such as fast-food restaurants. Therefore, odor is considered a potentially significant impact and will be further evaluated in the EIR.
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<td>7. TRANSPORTATION/TRAFFIC</td>
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<td>Would the project:</td>
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a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | | | |
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | | | | |
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | |
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | |  |
e. Result in inadequate emergency access? |  |  | | |
f. Result in inadequate parking capacity? |  |  | | |
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | | | | |

Discussion

a-b. The proposed project would include the development of 724 residential units and 270,256 square feet of commercial uses on vacant land. This could cause a substantial increase in traffic relative to the existing traffic load and capacity of the street system (i.e., SR 99, Cosumnes River Boulevard, Bruceville Road), and could potentially exceed applicable level of service standards on existing streets. This would represent a potentially significant impact. This impact will be evaluated in the EIR.

While the project could potentially result in significant traffic impacts to the local street system as discussed above, the project is proposed to be a transit-oriented development (TOD). TOD is designed, by the type, location, and mix of proposed uses, to reduce the amount of traffic that would otherwise be generated by more traditional residential and commercial development. In the case of the proposed project, TOD is provided by locating higher density residential uses adjacent to mass transit facilities to encourage home-to-work transit usage in place of automobile use, and by locating residential uses and neighborhood shopping and services on the same site to avoid the need for off-site shopping-related automobile trips. Furthermore, the project may provide services and housing opportunities for Cosumnes River College students within walking distance of the College, thus potentially reducing some automobile trips that currently occur in the area. The project's TOD-related trip reduction effects will be addressed in the EIR as part of the traffic analysis.
c. The proposed project would not be developed adjacent to an existing airport or within an Airport Land Use Plan area, and thus would not have the potential to affect air traffic patterns or result in substantial safety risks associated with airports. The proposed project would also not include a level or type of development that would result in a substantial increase in air traffic levels as the majority of the jobs to be created would be lower-paying retail jobs that do not require business travel. Therefore, a less-than-significant impact would occur.

d, e. The proposed project would include a fully developed on-site roadway system. Multiple driveways into the project site are proposed to be developed to provide site access. West Stockton Boulevard would be extended to Bruceville Road for increased accessibility to the project site and to what amounts to a freeway frontage road to the southeast. A new North-South Road would be developed from the West Stockton Boulevard southward (stubbing at the southern boundary of the project site). The project would also increase the width of Bruceville Road adjacent to the project site. All these improvements are required to be consistent with City standards and with required consultations (such as consultation with the Fire Department and Department of Public Works) to ensure adequate roadway design and emergency vehicle access, and would enhance accessibility on and adjacent to the project site.

While on-site access, including emergency access, would be improved under the proposed project, and while proposed streets would be required to be designed to avoid roadway hazards, the on-site streets and access points as currently proposed may not be consistent with City standards. It is possible that roadway layout and design could create hazards, resulting in a potentially significant impact. The consistency of the proposed street system with City access and design requirements, and the potential roadway safety impacts associated with the proposed street system, will be evaluated in the EIR.

f. The proposed project would provide 2,094 on-site parking spaces. The required number of parking spaces for the proposed land uses is 1,840. Therefore, adequate on-site parking is proposed to serve the proposed project, and no impact would occur.

g. The City of Sacramento General Plan transportation element promotes the use of alternative forms of transportation including the use of bikes, walking and car pooling. The South Sacramento Community Plan designates an on-street bikeway within the vicinity of the project site (down the east side of Bruceville Road). The proposed project includes a Pedestrian Circulation Plan that includes on-site pedestrian paths and plazas within the project site itself, and sidewalks along the project's frontage with Cosumnes River Boulevard, Bruceville Road, and West Stockton Boulevard. However, the plans do not identify bicycle facilities or bus turnouts. Lack of incorporation of these facilities into the proposed project would represent a potentially significant impact. This impact will be evaluated in the EIR.

In addition to the above, both the City of Sacramento and the Sacramento Regional Transit District (RT) have plans and programs in place to encourage the use of light rail as an alternative mode of transportation. The City's General Plan and South Sacramento Community Plan purposely designate lands adjacent to existing and future light rail lines and stations for higher density residential and office development with the expectation that this type of development would promote the use of

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23 City of Sacramento, South Sacramento Community Plan, Map 15 on page 62, August 1986.
light rail and thus would potentially reduce regional traffic congestion, air quality emissions, and urban sprawl. The City's General Plan identifies, as a potential future track alignment for a South Sacramento light rail line, a future track segment located along the south side of Cosumnes River Boulevard between Bruceville Road and SR 99 in the northern portion of the project site. Further consideration of this alignment by the Sacramento Regional Transit District (RT) has been abandoned in favor of routing the tracks south down Bruceville Road, and turning east (south of the College Square project site), before crossing SR 99. As part of its South Sacramento Phase 2 Corridor Project study, RT will determine whether to route this Bruceville Road track alignment on the west side, the east side, or down the center median of Bruceville Road.

In light of City and RT plans to develop a light rail line and station in the vicinity of the project site, the plans for the College Square project include proposals to both accommodate the future planned transit facilities and develop transit-oriented development (TOD) to take advantage of this future mass transit opportunity.

The College Square project would accommodate future planned transit facilities by providing separate development scenarios to reflect the three possible future light rail alignments down Bruceville Road. The first scenario (the proposed project) is designed assuming that the light rail line is eventually developed on either the west side of Bruceville Road or down the center median of Bruceville Road. The second scenario (the Transit Station Alternative) is designed assuming that the light rail line is eventually developed on the east side of Bruceville Road.

The College Square project would include TOD by providing: (1) higher density residential uses adjacent to future mass transit facilities (the south Sacramento light rail line and station) to encourage mass transit usage; (2) residential and service commercial uses on the same site to reduce off-site shopping-related automobile trips by on-site residents; and (3) housing opportunities within walking distance for Cosumnes River College students who currently use their automobiles to get to the campus. TOD is designed, by the type, location and mix of proposed uses, to reduce the amount of traffic that would otherwise be generated by more traditional residential and commercial development. The proposed project is designed to reduce existing traffic (Cosumnes River College students), reduce the incremental increase in future traffic that would otherwise be generated by development of the project site under with traditional land uses, and to take advantage and encourage use of future mass transit opportunities.

Per the above, the proposed project provides planning for, and would help support, City and RT policies, plans, and programs that encourage the use of light rail as an alternative mode of transportation. However, because entitlements being sought under the proposed project include a General Plan Amendment, Community Plan Amendment, and rezone, there is a potential that the proposed project could affect the light rail ridership assumed by the City and RT in their transit plans (which are based on buildout under existing General Plan land use designations and zoning). In addition, the project as planned would be “overparked”, meaning that the applicant proposes more parking than required by City code, which could conflict with the City’s alternative transportation goal. For these reasons, the consistency of the proposed project with the transit plans and policies of the City and RT will be evaluated in the EIR.
Environmental Checklist

8. **BIOLOGICAL RESOURCES.**

*Would the project:*

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

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

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?

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 wildlife nursery sites?

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?

**Discussion**

a. The following information sources were used to develop a list of sensitive biological resources that are known to occur in the vicinity of the project site:
Environmental Checklist

- Rare Plant Surveys conducted by ECORP (April 27 and June 13, 2000).
- Wetland Delineation Report prepared by ECORP (June 20, 2000 and revised September 13, 2000).
- Biological Opinion for vernal pool tadpole shrimp and vernal pool fairy shrimp (USFWS February 7, 2002).
- Cosumnes River Boulevard/Calvine Rd. Interchange Draft EIR (City of Sacramento 1992), and
- California Department of Fish and Game California Natural Diversity Database (CNDDB 2001).

Sensitive biological resources are those protected by federal, state, or local resource conservation agencies and organizations.

Based on the habitat available on the project site and reported occurrences in the vicinity, six special-status plant species have the potential to occur on the project site: dwarf downigia (Downigia pusilla), Bogg’s Lake hedge-hyssop (Gratiola heterosepala), Greene’s legenere (Leganere limosa), Sacramento Orcutt grass (Orcuttia visida), slender Orcutt grass (Orcuttia tenui), and Sanford’s arrowhead (Sagittaria sanfordii). No special-status plants were found on the project site during two formal rare plant surveys conducted by ECORP (April 27, 2000, and June 13, 2000).

Fourteen special-status animal species have the potential to occur on the project site: vernal pool fairy shrimp (Branchinecta lynchii), vernal pool tadpole shrimp (Lepidurus packardi), California linderiella (Linderiella occidentalis), valley elderberry longhorn beetle (Desmocerus californicus dimorphus), California tiger salamander (Ambystoma californiense), western spadefoot (Sapeloops hammondii), northwestern pond turtle (Clemmys marmorata marmorata), giant garter snake (Thamnophis gigas), tricolored blackbird (Agelaius tricolor), burrowing owl (Athene cunicularia), Swainson’s hawk (Buteo swainsoni), northern harrier (Circus cyaneus), white-tailed kite (Elanus leucurus), and loggerhead shrike (Lanius ludovicianus). Five of special-status animal species identified above are listed as threatened or endangered under the federal Endangered Species Act and/or California Endangered Species Act: vernal pool fairy shrimp, vernal pool tadpole shrimp, valley elderberry longhorn beetle, Swainson’s

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26 U.S. Fish and Wildlife Service, Formal Consultation on College Marketplace Project (Corp #200000334), Sacramento County, California, February 7, 2002.

27 City of Sacramento, Cosumnes River Boulevard/Calvine Road Interchange Draft EIR (SC #92022048), September 1992.

28 California Department of Fish and Game California Natural Diversity Database (CNDDB 2001), consulted by EDAW on March 11, 2002.
hawk, and giant garter snake. In addition, California tiger salamander is a candidate for federal listing. Vernal pool crustaceans are known to occur on the project site.

The U.S. Fish and Wildlife Service has issued a Biological Opinion for vernal pool crustaceans for the project (February 7, 2002), which authorizes incidental take of individuals and 1.96 acres of habitat, given terms and conditions, including purchasing mitigation credits. In addition, 2.14 acres of habitat is authorized to be indirectly affected by the project. Therefore impacts to vernal pool crustaceans are expected to be less than significant with the mitigation incorporated. Impacts to the four other listed or candidate species are potentially significant.29

The remaining eight animal species are considered Species of Special Concern by the Department of Fish and Game and/or are protected under the Fish and Game Code.

Based on the above, the proposed project would have the potential to result in a substantial adverse effect on listed species, which would be a potentially significant impact. This impact will be evaluated in the EIR.

The Rare Plant Surveys, Wetland Delineation, CNDDB database search, and other background research conducted by ECORP, which served as a partial basis for the above response, do not cover the 9.35-acre southwest parcel that was added to the project site subsequent to conducting this background research. The background research will be expanded for the EIR, if required, as part of the evaluation of potential project impacts to listed species.

b,c. The project site contains protected wetlands and other Waters of the U.S. A wetland delineation was performed by ECORP on March 8-9, 2000, and was verified by the U.S. Army Corps of Engineers (USACE) on November 8, 2000.30 A total of 3.94 acres of Waters of the U.S. have been mapped for the project site, including 0.55 acre of seasonal wetlands, 0.04 acre of vernal pools, 1.5 acres of seasonal marsh, and 1.85 acres of constructed pond.

In January 2001 the U.S. Supreme Court ruled that USACE does not have jurisdiction over isolated waters (Solid Waste Association of Northern Cook Counties v. USACE, January 9, 2001). If USACE determines that the waters are isolated, then a permit for fill of jurisdictional Waters of the U.S. under Section 404 of the Clean Water Act (CWA) will not be required from USACE. If the waters are not deemed isolated, a permit must be obtained from USACE. Regional Water Quality Control Board certification will be required under Section 401 of the CWA for the project regardless if the waters are determined to be isolated. Given the presence of wetlands and Waters of the U.S. on the project site, the project could have a potentially significant impact. This issue will be evaluated further in the EIR.

The Wetland Delineation conducted by ECORP, which served as a basis for the above response, did not cover the 9.35-acre southwest parcel that was added to the project site subsequent to conducting

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29 U.S. Fish and Wildlife Service, Formal Consultation on College Marketplace Project (Corp #200000334), Sacramento County, California, February 7, 2002.

this delineation. The delineation will be expanded for the EIR, if required, as part of the evaluation of potential project impacts to riparian habitat and other sensitive natural communities.

d. A wildlife corridor is generally a topographical/landscape feature or movement area that connects two areas of natural habitat. Wildlife corridors link areas of suitable wildlife habitat that are either separated by changes in vegetation, rugged terrain, or human disturbance. The project site is surrounded by existing development and SR 99 and is not connected to areas of natural habitat. No wildlife nursery sites are known to occur on the project site. Therefore, a less-than-significant impact would occur.

e. The City of Sacramento has a Heritage Tree Ordinance (September 14, 1993) that protects any tree, of good quality in terms of health and vigor of growth, with a trunk circumference of 100 inches or more measured 4 1/2 feet above ground level, or any native oak, buckeye, or sycamore tree having a circumference of 36 inches or greater. Trees meeting these criteria are not to be removed or pruned if the segment is more than 6 inches in circumference. In addition, it is prohibited to spray or place any chemical or deleterious substance on protected trees or on the soil within the drip line. The project site contains at least three small groupings of trees. Some of these trees could potentially fall under the authority of the Heritage Tree Ordinance, and if so, impacts to them could represent a potentially significant impact. This impact will be evaluated in the EIR.

f. The project site is not located within an area covered by an adopted Habitat Conservation Plan or other conservation plan. However, the project site is located within the vicinity of a wetlands mitigation bank located at the southwest corner of the Cosumnes River Boulevard/SR 99 intersection. As a part of the plan to improve the infrastructure needs of the project area, the project proponent will, pursuant to an agreement with the Department of the Interior, reduce the present impact to the wetlands mitigation bank by removing the roadway that encroaches into this area. This mitigation bank was established as part of an early roadway improvement project (either the Cosumnes River Boulevard extension or the Cosumnes River Boulevard/Calvine Road Interchange Improvement Project). This mitigation bank may have the potential to be effected by the proposed project. Any such affect would represent a potentially significant impact. This potential impact will be evaluated in the EIR (as indicated in Response 1c).
<table>
<thead>
<tr>
<th>Issues</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less-Than-Significant Impact</th>
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<tbody>
<tr>
<td>9. MINERAL RESOURCES.</td>
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<td>9.a. Result in the loss of availability of</td>
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<td>a known mineral resource that would be of</td>
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<td>value to the region and the residents of</td>
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<tr>
<td>the State?</td>
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<tr>
<td>9.b. Result in the loss of availability of</td>
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<tr>
<td>a locally-important mineral resource</td>
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<td>recovery site delineated on a local</td>
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<td>general plan, specific plan or other land</td>
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<tr>
<td>use plan?</td>
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</tbody>
</table>

**Discussion**

a,b. Mineral resources within the Sacramento-Fairfield production-consumption region (which includes the City of Sacramento) consist of aggregate deposits. The California Division of Mines and Geology has delineated two Mineral Resource Zones (MRZs) containing aggregate within the Sacramento-Fairfield production-consumption region: (1) deposits along Cache Creek west of Woodland; and (2) deposits extending several miles south of the American River between Folsom and the City of Sacramento.\(^{31}\) No such deposits are delineated on the project site or within the South Sacramento Community Plan area. Because development of the proposed project would not affect the availability of mineral resource, no impact would occur.

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### Environmental Checklist

<table>
<thead>
<tr>
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<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. HAZARDS AND HAZARDOUS MATERIALS. Would the project:</td>
<td></td>
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</tr>
<tr>
<td>a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>■</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>■</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>■</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>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?</td>
<td>■</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>■</td>
</tr>
<tr>
<td>f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>■</td>
</tr>
<tr>
<td>g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>■</td>
</tr>
<tr>
<td>h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>■</td>
</tr>
</tbody>
</table>

**Discussion**

a-c. The proposed project would not involve activities, such as industrial or manufacturing uses, that could generate hazardous emissions. The project would include a community-based retail center, which could use small quantities of cleaning agents and disinfectants, but the routine use, transport,
and disposal of such materials would be limited and would not be expected to present a health risk when handled according to manufacturers' instructions. However, included in the project plans is a gas station (to be located at the western portion of the project site near the intersection of Stockton Boulevard and Bruceville Road). This gas station would result in the routine transport, handling, and storage of petroleum products within relatively close proximity to the residential and senior housing proposed within the proposed project site. Therefore, the proposed project could create a hazard to the public or the environment through routine use or reasonably foreseeable upset and accident conditions, resulting in a potentially significant impact. This impact will be evaluated in the EIR.

d. It is unknown whether the project site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 56962.5, because, while a Phase I Environmental Site Assessment (ESA) has been conducted for the project that includes a search of such lists, the ESA was not available at the time this Initial Study was prepared. The project site may have been used in the past for agricultural activity that could have included the use of pesticides, herbicides, fertilizers, fuels, and/or other hazardous materials. In addition, several large piles of dirt, refrigerators, and other debris exist on the site indicating use of the site for minor dumping in recent years. Therefore, there is a potential that the project site may be on a government list of hazardous materials sites and/or may contain soil contamination that has not been previously identified. If soil contamination is present on the site, soil-disturbing activities associated with project construction could create a hazard to the public and/or the environment. Any such hazard would represent a potentially significant impact. This impact will be evaluated in the EIR.

e, f. The project site is not located in the vicinity of an existing public or private airstrip or associated air safety zones. Therefore, there would be no safety hazard to site occupants, and no impact would occur.

g. The project site is currently vacant. Access to the site is currently available from roadways around the periphery of the site, including Cosumnes River Boulevard, Bruceville Road, West Stockton Boulevard, and into the project site via West Stockton Boulevard. No roadways currently extend completely through the project site. Under the proposed project, West Stockton Boulevard would be extended from the southeastern portion of the project site to Bruceville Road, driveways into the project site would be developed along Bruceville Road, and an on-site roadway system would be developed to provide access to on-site uses (including a proposed North-South Road that would extend from West Stockton Boulevard to the southern boundary of the site where it would be stubbed). In addition, Bruceville Road would be widened under the project. Thus, the proposed project would increase, rather than decrease, access to, through, and around the project site, and would thus not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No impact would occur.

h. The City of Sacramento General Plan does not designate Wildland Fire Areas due to the lack of such areas within the City. The project site is relatively flat, is bounded on all sides by urban development and roadways, and is adjacent to existing municipal water pipelines and fire hydrants. Therefore, the project site cannot be considered to be located within a Wildland Fire Area. The proposed project would not expose people or structures to wildland fires. No impact would occur.
**Environmental Checklist**

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<tbody>
<tr>
<td>11. NOISE.</td>
<td><em>Would the project result in:</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>

**Discussion**

a. The proposed project would result in short-term and long-term increases in ambient noise levels. Depending on the activities being performed, as well as the duration and hours during which activities occur, noise associated with project construction activities could result in a temporary substantial increase in average daily ambient noise levels at on-site (i.e., residential, child care and senior housing) and nearby noise-sensitive receptors (i.e., residential uses to the northwest and south, senior housing uses to the north, school uses to the west (Cosumnes River College). This noise could potentially exceed City Noise Ordinance standards at these receptors. Therefore, a potentially significant impact could occur. This impact will be evaluated in the EIR.

Operation of on-site stationary and area noise sources (e.g., heating and ventilation equipment, intercom systems, landscape maintenance equipment, and on-site vehicle operation), as well as increases in vehicle traffic on area roadways attributable to the proposed project, could result in long-term increases in ambient noise levels. This noise could potentially exceed both the City’s Noise Ordinance standards and the City’s General Plan land use compatibility noise standards at nearby...
noise sensitive receptors. Therefore, a *potentially significant impact* could occur. This impact will be evaluated in the EIR.

The proposed project would result in the development of sensitive noise receptors (apartments, senior housing, child care) adjacent to State Route (SR) 99. There is a potential that existing/future noise from SR 99 could result in exceedance of City General plan policies for land use compatibility at these receptors. Hence, the proposed project could potentially expose sensitive noise receptors to noise levels in excess of established standards, which would be a *potentially significant impact*. This impact will be evaluated in the EIR.

b. The proposed project would not result in the long-term operation of any major sources of ground-borne vibration or vibration-related noise that would affect nearby sensitive receptors. However, on-site construction activities may result in short-term increases in ground vibration. Ground vibration generated by construction equipment spreads through the ground and diminishes in strength with distance. The effects of ground vibration can vary from no perceptible effects at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and slight damage to nearby structures at the highest levels. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely result in structural damage. For most structures, a peak particle velocity (ppv) threshold of 0.5 inches per second is sufficient to avoid structure damage, with the exception of fragile historic structures or ruins.\(^{32}\) At the request of the U.S. Environmental Protection Agency, the Committee of Hearing, Bio-Acoustics, and Bio-Mechanics (CHABA) has developed guidelines for safe vibration limits for ruins and ancient and/or historic buildings. For fragile structures, the CHABA recommends a maximum limit of 0.25 inches per second ppv. For the protection of fragile, historic, and residential structures, the California Department of Transportation (Caltrans) recommends a more conservative threshold of 0.2 inches per second ppv.\(^{33}\)

The proposed project would not involve the use of any construction equipment or processes that would result in potentially significant levels of ground vibration, such as pile drivers or rock drills. Maximum ground-borne vibration levels typically generated by construction equipment associated with commercial development (e.g., bulldozers, jackhammers, haul trucks, graders) would not be anticipated to exceed 0.089 inches per second at 25 feet.\(^{34}\) As a result, predicted vibration levels would not be anticipated to exceed even the most conservative threshold of 0.2 inches per second ppv at the nearest structure. In addition, it should be noted that no historic structures that could potentially be adversely affected (i.e., multi-story masonry structures) are known to exist in the project vicinity. Therefore, the generation of excessive groundborne vibration and associated noise levels attributable to the proposed project would be *less-than-significant*.

c.d. See Response 11a.


\(^{33}\) California Department of Transportation, Transportation Related Earthborne Vibrations, June 1996.

The closest public passenger airport is Sacramento City Executive Airport, located in the Airport-Meadowview Community approximately 5.1 miles northwest of the project site. The closest private airstrip is Sunset Skyranch Airport, located approximately 5.5 miles southeast of the project site. The project site is not located within an airport land use plan area, or where such a plan has not been adopted, within two miles of an airport. The project site is not located within the aircraft noise and safety contours of either a public airport or private airstrip. As a result, the project site would not be subject to high levels of aircraft noise and would, therefore, not result in a safety hazard for people working in the area. Additionally, the proposed project would not affect nearby airport operations. Because the proposed project would not subject sensitive receptors to increases in aircraft noise levels, no impact would occur.
Environmental Checklist

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>12. PUBLIC SERVICES.</td>
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<tr>
<td>Would the project result in substantial adverse physical impacts</td>
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<tr>
<td>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:</td>
<td></td>
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<tr>
<td>a. Fire protection?</td>
<td>☐</td>
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<td>☐</td>
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<tr>
<td>b. Police protection?</td>
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<tr>
<td>c. Schools?</td>
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<td>d. Parks?</td>
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<tr>
<td>e. Other public facilities?</td>
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Discussion

a,b. The proposed project would be provided fire and police protection services by the City of Sacramento Fire and Police Departments.

The City bases its long-term demand projections for fire and police personnel and facilities on the amount of future development and hence future population that would result from buildout of the City under the City’s General Plan. As indicated the Project Location/Description section of this Initial Study, the proposed project would result in the development of 724 residential units and 270,256 square feet of commercial development compared to buildout of the project site under the General Plan that would result in 1,114 residential units and no commercial square footage. The proposed project would thus result in a smaller resident population at the project site and hence a smaller demand for fire and police services than planned for under the City’s General Plan. Hence, it is not anticipated that new fire or police facilities would need to be constructed to serve the proposed project. In addition, the project site is currently served by a fully developed roadway system, is directly adjacent to SR 99, is within close proximity to a fire station (City of Sacramento Fire Station #7, 1.2 miles to the northwest), and represents infill development rather than new development in an outlying area. Therefore, it is anticipated that emergency response times are, and would remain, acceptable under the proposed project. Based on the above, a less-than-significant impact would occur.

c. The proposed project would be provided school service by the Sacramento Unified School District. The proposed project would include a residential component and thus would generate a direct demand for school services and facilities from the District. This demand could manifest itself as an incremental increase in demand for existing school services and facilities, or could potentially manifest itself in a demand for new or altered school services and facilities if existing capacity is not sufficient. The latter would represent a potentially significant impact. This impact will be evaluated in the EIR.
The proposed project would be provided park service by the City of Sacramento Parks and Recreation Department. The City plans for parks and other public facilities based on the demand for such facilities that would be generated by buildout under its General Plan. While the proposed project would include the development of 724 residential units and thus would generate a direct demand for parks and other public facilities, this demand would be less than planned for the project site under the City’s General Plan (i.e., 1,114 residential units). Hence, a less-than-significant impact would occur.

The proposed project would include a commercial component with approximately 890 employees that could generate an indirect demand for parks and other public facilities. However, it is anticipated that this demand would be minor. This is because the type of jobs to be created (lower paying community/neighborhood commercial jobs) would tend to be filled by existing unemployed residents in the community rather than by persons moving in from outside the Sacramento region in response to the new employment opportunities provided by the project. Therefore, a less than significant impact would occur.
13. UTILITIES AND SERVICE SYSTEMS.

Would the project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

e. Result in a determination by the wastewater treatment provider 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?

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g. Comply with federal, state, and local statutes, and regulations related to solid waste?

Discussion

a.e. Wastewater treatment and disposal for the proposed project would be provided by the Sacramento Regional County Sanitation District's (SRCSD) Sacramento Regional Wastewater Treatment Plant (SRWTP). The SRWTP, located in Elk Grove, has a permitted treatment capacity of 181 million gallons per day (mgd) and currently treats approximately 155 mgd. An expansion is being planned to increase the capacity of the plant to 218 mgd, which would serve the buildout populations of the City and County of Sacramento and the City of West Sacramento through the year 2020.35

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35 EDAW, Inc., Draft EIR for the 65th Street Transit Village Project (SCH #2000052093), prepared for the City of Sacramento, December 2001.
Using wastewater generation rates of 300 gallons/unit/day\textsuperscript{36} for multifamily residences and 16.67 gallons/1,000 square feet/day\textsuperscript{37} for commercial development, the 724 residential units and 270,256 square feet of commercial uses proposed under the College Square project would generate an estimated 221,705 gallons per day (gpd) of wastewater (0.222 mgd). This would represent 1% of the existing unused capacity at the SRWTP. The SRWTP thus has adequate existing unused treatment/disposal capacity to serve the proposed project even without the planned plant expansion to 218 mgd. Wastewater treatment plant capacity planning is forecasted on projections of future growth, which is based on buildout under existing General Plan land use designations. Because the quantity of wastewater to be generated by the proposed project would be less than that which would be generated under buildout of the project site under the existing General Plan (i.e., 1,114 res. units x 300 gallons/unit/day per unit = 334,200 gpd or 0.334 mgd) the proposed project would not generate wastewater in excess of existing or planned SRWTP capacity. In addition, the proposed project would not include the types of uses (i.e., industrial, manufacturing), which could create potential water quality issues at the SRWTP (such as high mercury, copper, etc.), which could interfere with the plant complying with its Regional Water Quality Control Board discharge permits. Therefore, a less-than-significant impact would occur.

The project site is surrounded on all sides by urban development and represents infill development rather than the expansion of urban uses to an un-urbanized area. Existing City of Sacramento water mains and SRCSD sewer mains are currently located in Cosumnes River Boulevard and Bruceville Road, which run along the northern and western boundaries of the project site, respectively.\textsuperscript{38} No extension of major water and sewer mains is required. Rather, only feeder lines off these major trunk lines will be necessary to serve the proposed project.

As stated in Response 13a, adequate wastewater treatment facilities and capacity currently exist to accommodate wastewater from the proposed project.

Water for the proposed project would be provided by the City of Sacramento. The City is currently under contract with the U.S. Bureau of Reclamation to receive a maximum of 326,800 acre-feet of surface water from the American and Sacramento Rivers annually. According to the SGPU EIR, the maximum water demand projected for the City at full buildout of the SGPU area, which includes the College Square project site, is approximately 216,954 acre-feet.\textsuperscript{39} The City thus has adequate existing unused water capacity to serve the proposed project. For the same reasons as discussed for wastewater under Response 13a, adequate water facilities and capacity currently exist to provide water for the proposed project.

Based on the above, a less-than-significant impact would occur.

\textsuperscript{36} City of Sacramento, City of Sacramento General Plan Update Draft EIR, page 1-5, March 1987.

\textsuperscript{37} EIP, Draft EIR for the R Street Corridor Plan, prepared for the City of Sacramento, July 1995.

\textsuperscript{38} The Spink Corporation, Jacinto Creek Planning Area Infrastructure and Utilities Study, prepared for the City of Sacramento, October 30, 1996, Figures 3 and 4.

\textsuperscript{39} Ibid, page 1-5.
The 63-acre project site is located on vacant land located within the Jacinto Creek Drainage Master Plan (Master Plan) area. The Master Plan area covers 500-acres, which is split into five watersheds that drain into Strawberry, Jacinto, and Laguna creeks. The project site is located in Watershed 1, a 117.5-acre area bounded by Cosumnes River Boulevard on the north, Shasta Avenue on the south, Bruceville Road on the west and SR 99 on the east. As an input to planning for the future needs of the drainage area, the Master Drainage Plan made several observations/assumptions concerning Watershed 1: (1) the current stormwater drainage facilities were undersized and could not adequately convey runoff under buildout conditions; (2) Watershed 1 would be built out in accordance with the General Plan (largely multifamily residential with approximately 70% impervious surfaces); and (3) drainage infrastructure planning under the Master Plan is based on buildout under the General Plan.\

The proposed project would require the construction of a new on-site stormwater drainage system that would discharge to existing off-site storm drain facilities located at the northwest corner of the Cosumnes River Boulevard and Bruceville Road intersection. Because the Drainage Master Plan for the Jacinto Creek Planning Area assumes development of Watershed 1 under the General Plan, which the Master Plan assumes would result in approximately 70% impervious surfaces, and because the proposed project would develop the project site with regional shopping center uses with approximately 82% impervious surfaces, the proposed project could potentially generate a greater quantity of stormwater runoff from the project site than anticipated in the Drainage Master Plan. This could potentially result in an exceedance of off-site storm drain capacity, thus requiring the construction of new off-site drainage facilities or the expansion of existing facilities, with associated potentially significant impacts. These impacts will be evaluated in the EIR.

d. The City of Sacramento is the water supplier that would provide potable water for the proposed College Square project. As discussed under Response 13b, the SGPU and the Jacinto Creek Planning Area Infrastructure and Utilities Study provide information that supports the conclusion that the City has adequate capacity and infrastructure to provide water to the proposed project. However, new state legislation requires that additional data be gathered to determine whether sufficient water supplies exist to serve the project.

Senate Bill (SB) 610 (§10910 of the California Water Code), adopted in January 2001, ties approval of large developments (e.g., more than 500 dwelling unit equivalents) such as College Square to the availability of water supplies adequate to serve the proposed project as well as other anticipated growth in the water supplier’s service area. Under SB 610, a Water Supply Assessment (WSA) must be prepared by the lead agency that demonstrates the availability of adequate existing and future water supplies to serve the project. The content requirements for the assessment include, but are not limited to, identification of the existing and future water suppliers, and quantification of water demand and supply by source in 5-year increments over a 20-year period. This information must be provided for average normal, single-dry, and multi-dry years. SB 610 further requires that the findings and conclusions of the analysis be included in the EIR for the project, and that the WSA be included as a technical appendix to the EIR.

Although preliminary evidence from the SGPU suggests that the City of Sacramento has adequate water supplies to serve the proposed project and cumulative development, a WSA is required under

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40 Ibid, page 5.
SB 610 to definitively make this determination. As a WSA has not yet been prepared for the proposed project, this impact is identified as potentially significant. This impact will be evaluated in the EIR. A WSA will be prepared for the project as required under SB 610 and summarized/included in the EIR.

Seventeen different service providers, including the City, provide solid waste collection for commercial properties and businesses within the City of Sacramento. Each business and commercial property is responsible for contracting for their own solid waste collection service. The commercial solid waste haulers can dispose of the collected waste at whatever landfill facility or transfer station they select. The City of Sacramento has established a significance threshold for solid waste of 500 tons per year.\footnote{City of Sacramento, Initial Study for Florin Road McDonald’s (P99-151), November 29, 2001.} Using generation rates of 6.4110 lbs/day/unit\footnote{Impact Sciences, Inc., Draft Environmental Impact Report for the Lent Ranch Marketplace project, SCH# 1997122002, prepared for the City of Elk Grove, October 2000, page 4.6-39.} for multifamily residential and 0.0132 lbs/day/square\footnote{Ibid.} foot for commercial, it is anticipated that the proposed project would generate approximately 8,209 lbs/day or 1,498 tons per year of solid waste. Therefore, while the project would comply with all federal, state and local solid waste regulations, it would exceed the City’s significance threshold for solid waste and thus would have a potentially significant impact. This impact will be evaluated in the EIR.
14. **AESTHETICS.**  

*Would the project:*  

- **a.** Have a substantial adverse effect on a scenic vista?  
- **b.** Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?  
- **c.** Substantially degrade the existing visual character or quality of the site and its surroundings?  
- **d.** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?  

<table>
<thead>
<tr>
<th>Potential Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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**Discussion**

- **a, b.** The project site is surrounded on all sides by urban development. The project site does not contain scenic resources such as rock outcroppings or historic buildings, is not located in an area designated as a scenic resource or scenic vista, and is not located along a State-designated scenic highway. Furthermore, the project site is not located on elevated terrain (which would make it more visible), and would not include the development of medium or high-rise development that could adversely affect scenic vistas (such as views of the Sierra Nevada). Therefore, *no impact* would occur.

- **c.** The project site is visible from an adjacent residential tract and senior housing to the northwest, Cosumnes River College to the west, and large lot single family residences to the south. The site is also visible from motor vehicle traffic on SR 99, Cosumnes River Boulevard, and Bruceville Road. Development of the proposed project would result in the conversion of the project site from an existing vegetated vacant area with wetlands and at least three small groupings of trees to a lighted mixed residential and commercial development with structures of up to 45 feet in height, a substantial amount of hard scape (i.e., approximately 82% impervious surfaces such as buildings, parking lots and roadways), and lighted signage and parking lots. While this would represent a change in the appearance of the project site as seen from the adjacent uses, the project site is located in an urban area and is surrounded on all sides by urban development such that development of the site under the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. Furthermore, development of the project site has been planned for in the General Plan and the potential environmental affects evaluated in the General Plan Update EIR. Hence, a *less than significant* impact would occur.

- **d.** The proposed project would result in the conversion of the project site from an unin to a lit environment. While the development of the project site has been planned for in the General Plan and evaluated in the General Plan Update EIR, the character of the lighting that will be developed may potentially interfere with the nighttime views of adjacent uses. Hence, a *potentially significant impact* could occur and will be evaluated in the EIR.
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<th>Issues</th>
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<tr>
<td><strong>CULTURAL RESOURCES.</strong></td>
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<td><em>Would the project:</em></td>
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<tr>
<td>a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</td>
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<tr>
<td>b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
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<tr>
<td>c. Directly or indirectly destroy a unique paleontological resource or unique geologic feature?</td>
</tr>
<tr>
<td>d. Disturb any human remains, including those interred outside of formal cemeteries.</td>
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</tbody>
</table>

**Discussion**

a,b,d. An archaeological and historic study conducted for the adjacent Cosumnes River Boulevard/SR 99 interchange in 1992 did not identify the presence of listed archaeological sites, historic sites, or human remain sites in the vicinity of the interchange. The study did indicate the presence of several less-than-significant historic resource sites, and recognized the potential for the interchange site and adjacent areas (such as the College Square project site) to contain as-of-yet undiscovered archaeological sites or human remains, which, if present, would require mitigation.⁴⁴

Records at the North Central Information (NCIC) of the California Historical Resources Information System (CHRIS) have not yet been consulted to determine if the project site contains listed archaeological resource or human remains sites. Therefore, the presence of listed archaeological resource, historic resources, and human remains at the project site has not been ruled out. In addition, the project site may contain as-of-yet undiscovered/unrecorded archaeological resources, historic resources (deposits rather than structures), and/or human remains. Any disruption or destruction of archaeological resources, historic resources, or human remains that may be present at the project site would represent a *potentially significant impact*. This impact will be evaluated in the EIR.

The southwest portion of the project site (the “southwest parcel”) contained several structures in January 2002, including a farm residence and several ancillary structures along Bruceville Road (APN 117-0182-020) and one small wooden storage shack approximately 500 feet further east (APN 117-0182-021). Based on a brief windshield survey of these structures in January 2002, it appeared that they could have been greater than 45 years of age and thus could potentially represent historic structures. The structures on the first parcel along Bruceville Road were removed under City permit during the first six months of 2002. The shack on the second parcel still stands. The City issued a demolition permit for the structures on parcel one after determining that the structures were not historic. It thus can be reasonably assumed that the small shack on the second parcel also does not

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⁴⁴ City of Sacramento, Cosumnes River Boulevard/Calvine Road Interchange Draft EIR (SC #92022048), September 1992.
represent a historic structure. Its removal would thus result in no impact to historic resources. Obviously, if the records search to be conducted for the project site as discussed in the previous paragraph does list the shack as a potential historic resource, further study would be undertaken in the EIR to determine whether the shack represents a historic resource (i.e., a California Register of Historic Places eligibility evaluation).

c. There is no evidence provided in the City of Sacramento General Plan, South Sacramento Community Plan, the EIR for these plans, or the Cosumnes River Boulevard/Calvine Road Interchange Draft EIR that the South Sacramento area, including the project site, contains unique paleontological resources. In addition, the project site is relatively flat and does not contain unique geological features. Therefore, no impact would occur.
16. **RECREATION.**

   a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

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

**Discussion**

a, b. The proposed project would be served by the City of Sacramento Parks and Recreation Department. The site would be developed under the proposed project with mixed residential and commercial uses, which would create a smaller on-site population than would buildout of the site under the existing General Plan land use designation of the site (see Response 12d for further discussion). Therefore, it is anticipated that demand for park and recreational facilities would be less under the proposed project than is planned for the site under the City’s General Plan. Furthermore, the project would be subject to any City taxes and fees for park facilities and services, and thus would pay for any park demand created by the project. Hence, a *less than significant impact* would occur. A *less-than-significant impact* would occur.

The proposed project would create jobs (approximately 890) that could, potentially, generate an indirect demand for park and recreational facilities. However, it is anticipated that this incremental increase in demand would be insufficient to cause substantial physical deterioration of park or recreational facilities, or require the construction of new park or recreational facilities, for several reasons. First, it is anticipated that the majority of the jobs to be created by the proposed project (i.e., community/neighborhood commercial jobs) would be filled largely by existing Sacramento residents rather than by employees from outside the Sacramento region. Hence, only a small proportion of the jobs to be created by the proposed project would cause a new demand for park and recreational facilities. Second, it is unlikely that a substantial number of on-site employees would utilize local park facilities as these employees would be coming to the project site to work rather than to take time off for recreational purposes. Third, the proposed project would increase general fund tax revenues to the City, which would be expected to offset the cost of increased demand for park and recreational facilities to be created by the proposed project. For these reasons, a *less-than-significant impact* would occur.
17. **MANDATORY FINDINGS OF SIGNIFICANCE.**

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

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**Discussion**

a. The proposed project would have the potential to degrade the quality of the environment by creating traffic, air emissions, noise, and by potentially impacting aesthetics and water quality. The project could also potentially reduce the number or restrict the range of a rare or endangered plant or animal species. Therefore, the project could have a potentially significant impact. This impact will be evaluated in the EIR (in terms of the environmental issue areas to be evaluated (i.e., traffic, air).

b. The proposed project would generate traffic, air emissions, and noise, and could result in cultural resource and terrestrial biology impacts that, when added to other past, present, and reasonably foreseeable future projects, could result in impacts that are cumulatively considerable. Therefore, the project could have a potentially significant impact. This impact will be evaluated in the EIR (in terms of cumulative impacts).

c. The proposed project would have the potential to generate traffic, air emissions, noise, aesthetics, and other impacts that could potentially cause substantial adverse effects on human beings. Therefore, a potentially significant impact would occur. This impact will be evaluated in the EIR (in terms of the environmental issue areas to be evaluated (i.e., traffic, air).
REFERENCES


California Department of Fish and Game, California Natural Diversity Database (CNDDB 2001), consulted by EDAW on March 11, 2002.

California Department of Transportation, Transportation Related Earthborne Vibrations, June 1996.


City of Sacramento, Heritage Tree Ordinance, September 14, 1993.


City of Sacramento, South Sacramento Community Plan, August 1986.

City of Sacramento, Initial Study for Florin Road McDonald’s (P99-151), November 29, 2001.


Dale Stickney, California Department of Conservation, Division of Mines & Geology, personal communication with Craig Cross of EDAW, October 23, 2003.


EDAW, Inc., Draft EIR for the 65th Street Transit Village Project (SCH #2000052093), prepared for the City of Sacramento, December 2001.

EIP, Draft EIR for the R Street Corridor Plan, prepared for the City of Sacramento, July 1995.
Ensign & Buckley Consulting Engineers, Jacinto Creek Planning Area - Drainage Master Plan Report, April 15, 1996.

FEMA Q# Flood Data, 1996.


Joe Nicholas, City of Sacramento Building Department, personal communication with Robert Hilman of EDAW, October 23, 2002.

LPA Sacramento, Inc., City of Sacramento Application and Project Questionnaire for College Square, September 18, 2001.

Planning Dynamics Group, Draft EIR for the Granite Regional Park PUD (SCH #97052084), prepared for the City of Sacramento, February 1998.

Regional Transit, Letter from Pilka Robinson, former General Manager at RT to Douglas Sutherland of Citadel Equities Group, LLC, January 8, 2002.


The Spink Corporation, Jacinto Creek Planning Area Infrastructure and Utilities Study, prepared for the City of Sacramento, October 30, 1996, Figures 3 and 4.


U.S. Fish and Wildlife Service, Formal Consultation on College Marketplace Project (Corp #200000334), Sacramento County, California, February 7, 2002.
PUBLIC NOTICE
Appendix C

Comments Received on the NOP
January 29, 2003

Mr. Brad Shirhall, EIR Project Manager  
City of Sacramento, Planning and Building Department  
1231 “I” Street, Room 300  
Sacramento, CA 95814

RE: NOTICE OF PREPARATION (NOP) FOR AN ENVIRONMENTAL IMPACT REPORT FOR THE COLLEGE SQUARE PLANNED UNIT DEVELOPMENT P00-147

Dear Mr. Shirhall:

Thank you for referring this NOP to the staff of the Sacramento Metropolitan Air Quality Management District (District) for review and comment. Our comments are as follows:

1. If the project exceeds the District’s “Thresholds of Significance” for emissions of reactive organic gases (ROG), oxides of nitrogen (NOx), or particulate matter (PM10), we recommend that the DEIR include mitigation measures to reduce these emissions to levels below the thresholds. Such measures could include the use of reduced-emission heavy-duty construction equipment. The Thresholds of Significance, as well as District Rules, are available at our web site, which is www.airquality.org.

2. If transportation will be provided to the senior housing component of the project, to transport residents to shopping facilities or to appointments, we recommend that the DEIR explore the use of reduced-emission vehicles as a further means or reducing operational emissions.

3. The requirements of District Rule 403 – Fugitive Dust will apply to any grading operation for this project. The DEIR should include the requirements of this Rule as a mitigation measure.

Should you have any questions regarding these comments, please contact me at 916-874-4885 or pstafford@airquality.org.

Sincerely,

Phil Stafford  
Associate Air Quality Planner

cc: Ron Maertz, SMAQMD

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NOTICE OF PREPARATION FOR COLLEGE SQUARE P00-147, STATE CLEARINGHOUSE #2002122088, SACRAMENTO, SACRAMENTO COUNTY

We have received the above referenced College Square P00-147 Notice of Preparation and offer the following comments with which the Regional Water Quality Control Board (RWQCB) is concerned.

The proposed development would disturb more than five acres of land during construction. The project must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (General Permit). This can be accomplished by filing a Notice of Intent with the State Water Resources Control Board, Division of Water Quality. The project sponsor must propose and implement controls measures that are consistent with the General Permit and with the recommendations and policies of the local agency and the RWQCB.

There are impacts to seasonal wetlands, vernal pools, seasonal marsh and the construction of ponds associated with the project. Development of the project would result in the fill of a total of 13.29 acres of Waters of the U.S.

Discharge of dredged or fill material to waters of the State without filing a Report of Waste Discharge is a violation of the California Water Code (CWC) as specified under Section 13376, which states as follows:

"Any person discharging dredged or fill material or proposing to discharge dredged or fill material into the navigable waters of the United States within the jurisdiction of this State shall file a report of the discharge in compliance with the procedures set forth in Section 13260..."

Regional Board Staff are unable to offer more specific comment at this time. However, I have attached a copy of our General Comments, which discuss the Regional Board’s area of responsibility, and which should help guide you in the preparation of further CEQA documentation.
13 January 2003

Brad Shirhall
City of Sacramento
1231 I Street, Room 300
Sacramento, California 95814

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If you have any questions, please contact me at 916.255.3063.

CHRISTINE PALISOC
Environmental Scientist

Enclosure: Storm Water General Comments

cc: State Clearinghouse (w/out attachment)
General Comments

The Central Valley Regional Water Quality Control Board (Regional Board) is charged with the protection of the Waters of the State of California in the Central Valley Region, including wetlands and stormwater quality. The Regional Board is responsible for administering the regulations established by the Federal Clean Water Act. Additionally, the California Water Code establishes broad state authority for regulation of water quality. The Water Quality Control Plan (Basin Plan) establishes water quality objectives for the Sacramento River and San Joaquin River Basins and explains the Regional Board’s strategy for regulating water quality. The Basin Plan also describes the range of responses available to the Regional Board with regard to actions and proposed actions that degrade or potentially degrade the beneficial uses of the Waters of the State of California.

NPDES

Water quality degradation is regulated by the Federal National Pollutant Discharge Elimination System (NPDES) Program, established by the Clean Water Act, which controls and reduces pollutants to water bodies from point and non-point discharges. In California, the program is administered by the California Regional Water Quality Control Boards. The Regional Board issues NPDES permits for discharges to water bodies in the Central Valley Region, including Municipal (area- or county-wide) Stormwater Discharge Permits.

Projects disturbing more than five acres of land during construction must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (General Permit). On March 10, 2003 as part of the new Phase II storm water regulations, all construction activity that disturbs one acre or greater or is part of a larger common plan of development or sale will also require coverage under the General Permit. This can be accomplished by filing a Notice of Intent (NOI) with the State Water Resources Control Board, Division of Water Quality (State Board). An NOI and the General Permit can be obtained from the State Board at (916) 341-5536 or by visiting the stormwater website located at http://www.swrcb.ca.gov/stormwtr. The project sponsor must propose and implement controls measures that are consistent with the General Permit and with the recommendations and policies of the local agency and the RWQCB.

Projects that include facilities with discharges of Storm Water Associated with Industrial Activity must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Industrial Activity. This may be accomplished by also filing an NOI and contacting the State Board at (916) 341-5536 or by visiting the stormwater website located at http://www.swrcb.ca.gov/stormwtr. The project sponsor must propose control measures that are consistent with this, and with recommendations and policies of the local agency and the RWQCB. In a few cases, the project sponsor
may apply for (or the RWQCB may require) issuance of an individual (industry- or facility-specific) permit.

Impacts and Mitigation Measures

Wetlands

Wetlands enhance water quality through such natural functions as flood and erosion control, stream bank stabilization, and filtration and purification of contaminants. Wetlands also provide critical habitat for hundreds of species of fish, birds, and other wildlife, offer open space, and provide many recreational opportunities. Water quality impacts occur in wetlands from construction structures in waterways, dredging, filling, and altering drainage to wetlands.

The Regional Board must certify that any permit issued by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act (covering, dredging, or filling of Waters of the United States, including wetlands) complies with state water quality standards, or waive such certification. Section 401 Water Quality Certification is necessary for all 404 Nationwide permits, reporting and non-reporting, as well as individual permits.

All projects must be evaluated for the presence of jurisdictional wetlands and other Waters of the State. Destruction of or impact to these waters should be avoided. If the proposed project impacts wetlands or other Waters of the State and the project applicant is unable to demonstrate that the project was unable to avoid these adverse impacts, water quality certification will most likely be denied. 401 Certification may also be denied based on significant adverse impacts to wetlands or other Waters of the State.

Storm Water Quality Control

Storm water is the major source of fresh water to creeks and waterways. Storm water quality is affected by the variety of land uses and the pollutants generated by these activities. Development and construction activities cause both site-specific and cumulative water quality impacts. Water quality degradation may occur during construction due to discharges of sediment, chemicals, and wastes to nearby storm drains and creeks. Water quality degradation may occur after construction is complete, due to discharges of petroleum hydrocarbons, oil, grease, and metals from vehicles, pesticides and fertilizers from landscaping, and bacteria from pets and people. Runoff may be concentrated and storm water flow increased by newly developed impervious surfaces, which will mobilize and transport pollutants deposited on these surfaces to storm drains and creeks. Changes in runoff quantity or velocity may cause erosion or siltation in streams. Cumulatively, these discharges will increase pollutant load in creeks and wetlands within the local watershed, and ultimately in the Sacramento River and San Joaquin River Basins.

Project impacts should be minimized by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is required by the General Permit. The SWPPP should be consistent with the terms of the General Permit, policies and recommendations of the local agency (city or county) and the recommendations of the RWQCB. The SWPPPs should also be required for projects that may have impacts, but which are not required to obtain an NPDES permit. Preparation of a SWPPP should be a condition of development. Implementation of the SWPPP should be enforced during the
construction period via appropriate options such as citations, stop work orders, or withholding occupancy permits.

Impacts identified should be avoided and minimized by developing and implementing the types of controls explained in the San Francisco Regional Board’s Field Manual available from the Friends of the San Francisco Estuary at (510) 286-0924 or visiting their website at www.abag.ca.gov/bayarea/sfep/about/friends

Site Planning

The project should minimize impacts from the project development by incorporating appropriate site planning concepts. This should be accomplished by designing and proposing site planning options as early in the project-planning phase as possible. Appropriate site planning concepts to include, but are not limited to the following:

- Phase construction to limit areas and periods of impact
- Minimize directly connected impervious areas
- Preserve local topography, existing drainage courses and existing vegetation
- Locate construction and structures as far as possible from streams, wetlands, drainage areas, etc.
- Provide undeveloped, vegetative buffer zones between development and streams, wetland, drainage areas, etc.
- Reduce paved area through cluster development, narrower streets, use of porous pavement and/or retaining natural surfaces
- Minimize the use of gutters and curbs which concentrate and direct runoff to impermeable surfaces
- Use existing vegetation and create new vegetated areas to promote infiltration
- Design and layout communities to reduce reliance on cars
- Include green areas for people to walk their pets, thereby reducing build-up of bacteria, worms, viruses, nutrients, etc. in impermeable areas, or institute ordinances requiring owners to collect pet’s excrement
- Incorporate low-maintenance landscaping
- Design and layout streets and storm drain systems to facilitate easy maintenance and cleaning
- Consider the need for runoff collection and treatment systems
- Label storm drains to discourage dumping of pollutants into them

Erosion

The project should minimize erosion and control sediment during and after construction. This should be done by developing and implementing an erosion control plan, or equivalent plan. This plan should be included in the SWPPP. The plan should specify all control measures that will be used or which are anticipated to be used, including but not limited to the following:

- Limit access routes and stabilize access points
- Stabilize denuded areas as soon as possible with seeding, mulching, or other effective methods
Storm Water General Comments

- Protect adjacent properties with vegetative buffer strips, sediment barriers, or other effective methods
- Delineate clearing limits, easements, setbacks, sensitive areas, vegetation and drainage courses by marking them in the field
- Stabilize and prevent erosion from temporary conveyance channels outlets
- Use sediment controls and filtration to remove sediment from water generated by dewatering or collected on-site during construction. For large sites, stormwater settling basins will often be necessary

Chemicals and Waste Management

The project should minimize impacts from chemicals and wastes used or generated during construction. This should be done by developing and implementing a plan or set of control measures. The plan or control measures should be included in the SWPPP. The plan should specify all control measures that will be used or which are anticipated to be used, including, but not limited to the following:

- Designate specific areas of the site, away from streams or storm drains inlets, for storage, preparation, and disposal of building materials, chemical products and wastes
- Store stockpiled material and wastes under a roof or plastic sheeting
- Storm containers of paint, chemicals, solvents, and other hazardous materials stored in containers under cover during rainy periods
- Berm around storage areas to prevent contact with runoff
- Cover open dumpsters securely with plastic sheeting, a tarp, or other cover during rainy periods
- Designate specific areas of the site, away from streams or storm drain inlets, for auto and equipment parking and for routine vehicle equipment maintenance
- Routinely maintain all vehicles and heavy equipment to avoid leaks
- Perform major maintenance, repair, and vehicle equipment washing off-site, or in designated and controlled areas on-site
- Collect used motor oil, radiator coolant or other fluid with drip pans or drop cloths
- Store and label spent fluids carefully prior to recycling or proper disposal
- Sweep up spilled dry materials (cement, mortar, fertilizers, etc.) immediately - do not use water to wash them away
- Clean up liquid spills on paved or impermeable surfaces using “dry” cleanup methods (e.g. absorbent materials, cat litter, rags) and dispose of cleanup materials properly
- Clean up spills on dirt areas by digging up and properly disposing the soil
- Keep paint removal wastes, fresh concrete, cement mortars, cleared vegetation, and demolition wastes out of gutters, streams, an storm drains by using proper containment and disposal

Post Construction

The project should minimize impacts from pollutants that may be generated by the project following construction, when the project is complete and occupied or in operation. These pollutants may include: sediment, bacteria, metals, solvents, oil, grease, and pesticides, all of which are typically generated during the life of a residential, commercial, or industrial project after construction has ceased. This
should be done by developing and implementing a plan and set of control measures. The plan or control
measures should be included in the SWPPP.

The plan should specify all control measures that will be used or which are anticipated to be used,
including, but not limited to, the source controls and treatment controls. Additional source of
information that should be consulted for BMP selection includes the California Storm Water Best
Management Practice Handbook available through Bay Area Stormwater Management Agencies
Association. Visit their website at www.basmaa.org or via e-mail at info@basmaa.org.
Mr. Brad Shirhall  
EIR Project Manager  
City of Sacramento  
Planning & Building Department  
1231 I Street, Room 300  
Sacramento, CA 95814

Subject: NOTICE OF PREPARATION (NOP) OF AN ENVIRONMENTAL IMPACT REPORT FOR THE COLLEGE SQUARE PLANNED UNIT DEVELOPMENT (APPLICATION NUMBER P00-147)

Dear Mr. Shirhall:

The County of Sacramento Department of Transportation appreciates the opportunity to review the Notice of Preparation for the above referenced project. The traffic study for the development of the College Square project should include the following items:

1. Evaluation of project impacts on the traffic conditions during the AM and PM peak hour time periods.
2. The analysis should include existing, existing with project, cumulative and cumulative with project conditions.
3. Analysis of with and without the extension of Consumnes River Boulevard to I-5.
4. The intersections of the State Route 99 southbound off ramps and Calvine Road, State Route 99 northbound off ramps and Calvine Road, and Power Inn Road and Calvine Road should be included in the study scope. The roadway segment of Calvine Road from State Route 99 to Elk Grove-Florin Road should be included in the traffic study.

If you have any questions please call me at 874-6291.

Sincerely,

Jeffrey Clark, P.E., T.E.  
Senior Civil Engineer

JEC:jec

cc: Steve Hong, IFS  
Dan Shoeman
January 16, 2003

Brad Shirall, Associate Planner
City of Sacramento Planning and Building Department
1231 "I" Street, Room 300
Sacramento, CA 95814

Subject: Notice of Preparation (NOP) for an Environmental Impact Report for the College Square Planned Unit Development (Application No. P00-147).

Thank you for the opportunity to review and comment on the Notice of Preparation for the College Square Planned Unit Development, dated December 17, 2002. Upon reviewing the document we found the following items that need to be addressed in the EIR for the project:

- Potential growth inducement impacts associated with the commercial component of the proposed project.
- Potential impacts on the existing park and recreational facilities in the vicinity of the project.

Please send the EIR to our office when available.

If you have any questions, please contact me at 916.361.8384

Thank you,

David Young
Assistant Environmental Planner

Cc: Christine Crawford, AICP
Brad Shirall  
City of Sacramento  
1231 I Street, Room 300  
Sacramento, CA 95814

Dear Mr. Shirall:

Subject: College Square Planned Unit Development NOP  
APN: 117-0182-001,003,019,020,021,024,025,028,029, & 030; 117-0184-001 & 002  
Control No. P00-147

County Sanitation District 1 (CSD-1) has reviewed the subject documents and confirms that the Notice of Preparation finds that the project has a ‘less than significant impact’ on the sanitary sewer districts. The following conditions will be required of this project as outlined in our previous letters.

**CSD-1 Conditions:**

Connection to the public sewer system shall be required to the satisfaction of CSD-1.

A 20-foot public sewer easement shall be dedicated to CSD-1 on the final map. The sewer easement shall ensure continuous access for maintenance. Sacramento County Improvement Standards apply to any on-site sewer construction.

CSD-1 shall require an approved sewer study prior to the submittal of improvement plans for plan check to CSD-1.

The applicant shall enter into and record an Agreement for Conveyance of Easements with the City, in a form acceptable to the City Attorney, stating that each parcel shall convey to the remaining parcels, as needed, private easements for storm drainage, water, and sanitary sewer at no cost at the time of sale or other conveyance of any parcel. A note stating the following shall be placed on the Final Map: “The Parcels created by this map shall be developed in accordance with recorded agreement for conveyance of easements # (Book ___, Page ___).”
Brad Shirall  
December 26, 2002  
Page 2

CSD-1 Advisories:

Gravity sewer service may not be available to entire project area. Sacramento County Improvement Standards apply to on-site sewer construction.

Developing this property may require the payment of additional sewer impact fees. Applicant should contact the Fee Quote Desk at 876-6100 for sewer impact fee information.

If you have any questions regarding these comments, please call me at 876-6094.

Very truly yours,

[Signature]

Jeff Atteberry, P.E.
Local Sewer Engineering

JA:ds

cc: Christoph Dobson
January 17, 2003

02SAC0158
03-SAC-99 PM 16.254
College Square (P00-147)
Notice of Preparation

Mr. Brad Shirhall
City of Sacramento
Planning Department
1231 I Street, Suite 300
Sacramento, CA 95814

Dear Mr. Shirhall:

Thank you for the opportunity to review and comment on the College Square mixed use project proposal. Our comments are as follows:

- All issues contained in our prior letter of September 17, 2002 (enclosed) are still valid and apply to this project.

- A right-of-way reservation for the future ultimate 8 lane State Route 99 freeway, interchange auxiliary lanes, and ramp modifications adjacent to this project should be provided where needed and addressed in the DEIR. Participation in future studies regarding right-of-way allowances for the freeway widening along West Stockton Boulevard should be included in the mitigation measures for this project.

- Exhibit 3, showing the "Proposed Schematic Site Plan", does not show the layout of the Light Rail Transit (LRT) station buildings, if any, to protect against inclement weather, or the latest alignment for the Phase 2 light rail line bordering this proposed development area on the west and south.

- The DEIR should include greater detail and discussion addressing how Transit Oriented Development (TOD) will be applied for this project. Measures should be taken to interface pedestrian, bicycle and bus travel with light rail in the 63 acre project to encourage the most LRT station use.

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For example, the DEIR should describe how sidewalk placement, night lighting and bike routes would improve connectivity throughout the project. Bike storage facilities and lockers should also be planned near the LRT station.

- Site plans in the DEIR should expand on what is shown in Exhibit 3 to include the TOD development and the possible multimodal connectivity of pedestrian, bike, bus and LRT facilities, besides numerous parking lots emphasizing the promotion of vehicular use alone on the vacant 63 acres. A discussion of multi-level parking instead of so much at-grade parking should also be considered in the DEIR.

- To promote walking, bike and transit trips inherent with TOD development, will any service retail and restaurants be built in close proximity to the LRT station so that alternative transportation patrons may conveniently get food and shopping items? Illustrations should be provided to show the proximate connections between such commercial areas, the multimodal travel networks, the proposed Park and Ride Lot, and the LRT station. The DEIR should discuss how the project implements TOD development. The over abundance of vehicular parking areas shown in Exhibit 3 does not resemble TOD development.

Please provide our office with a copy of the DEIR and any further action regarding this project. If you have any questions regarding these comments, please contact Ken Champion at (916) 274-0615.

Sincerely,

JEFFREY PULVERMAN, Chief
Office of Regional Planning

c: Azedah Doherty, Sacramento Regional Transit
September 17, 2002

02SAC0105
03-SAC-99 PM 16.254
College Square (P00-147)
Revised Application

Mr. Thomas Pace
City of Sacramento
Planning Department
1231 I Street, Suite 300
Sacramento, CA 95814

Dear Mr. Pace:

Thank you for the opportunity to review and comment on the College Square project proposal. Our previous comments, provided in the enclosed letter, dated December 21, 2000, still apply. In addition, we have the following comments:

- A preliminary assessment of this project indicates that it could generate an appreciable increase in trips for the immediate vicinity. This level of new trips will require a Traffic Impact Study (TIS) to be prepared to evaluate traffic impacts at the SR 99/Cosumnes Boulevard/Calvine Road Interchange. A "Guide for the Preparation of Traffic Impact Studies" can be obtained from the following website: http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/. We will provide a hard copy of the guidelines if your agency does not have web access. The TIS should incorporate the following scenarios:
  
  Existing conditions without the project
  Existing conditions plus the project
  Cumulative conditions (without the project)
  Cumulative conditions (with project build-out, with and without the interchange)

- The traffic analysis should provide a Level of Service (LOS) analysis for the SR99 freeway ramps and ramp terminal intersections at the interchange. A merge/diverge analysis should be performed for

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freeway and ramp junctions and all analysis should be based on AM and PM peak hour volumes. The analysis should include the (individual, not averaged) LOS and traffic volumes applicable to all intersection road approaches and turn movements. The procedures contained in the Year 2000 Highway Capacity Manual should also be used as a guide for the traffic study.

- Mitigation measures should be identified where the project would have a significant impact. Caltrans considers the following to be significant impacts:
  - Off-ramps with vehicle queues that extend into the ramp’s deceleration area or onto the freeway.
  - Vehicle queues at intersections that exceed existing lane storage.
  - Project traffic impacts that cause any ramp’s merge/diverge Level of Service (LOS) to be worse than the freeway’s LOS.
  - Project impacts that cause the freeway or intersection LOS to deteriorate beyond LOS E for freeway and LOS D for highway and intersections. (If the LOS is already “E” or “F”, then a quantitative measure of increased queue lengths and delay should be used to determine appropriate mitigation measures.)

- Possible mitigation measures to consider and corroborate with the traffic analysis include coordination of the following improvements with the project “build out”:
  - Improving the SR99/Cosumnes River Boulevard Interchange signal phasing
  - Widening interchange ramps to increase capacity
  - Modifying ramp terminal intersections
  - Assessing right-of-way dedication needs for widened ramps

- The analysis of future traffic impacts should be based on a 20-year planning horizon.

- Future transportation systems assumed for cumulative conditions should only include those improvements, which are included in the Sacramento Area Council of Government’s 2002 Metropolitan Transportation Plan.

- Project sign plans near the State Route 99 freeway depicting the layout, orientation, glare intensity, and size should be submitted to Caltrans for our review.

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The proposed development of new residential and commercial units should mitigate construction activities such that any development would not contribute contaminants to storm waters handled by the State, for example oils, grease, sand, sediment, or debris. All runoff that enters State Route (SR) 99 right-of-way must meet Regional Water Quality Control Board (RWQCB) standards for clean water.

This development area is west of SR99 and drains ultimately to a 48-inch culvert on the south side of Cosumnes River Boulevard. Any increases of discharge into the State drainage system must be mitigated. Existing drainage patterns must be perpetuated or improved within the State right-of-way. Pre and post-project discharge information should be supplied for Caltrans review.

The incorporation of environmental Best Management Practices, i.e., retention ponds, infiltration trenches, or other drainage improvements should be used to mitigate drainage impacts from the proposed development.

Any work conducted within State right-of-way will require an encroachment permit. For permit assistance, please contact Bruce Capaul at (530) 741-4408.

Please provide our office with copies of any further action regarding this project. If you have any questions regarding these comments, please contact Ken Champion at (916) 274-0615.

Sincerely,

Dusan H. Wilson

JEFFREY PULVERMAN, Chief
Office of Regional Planning

Enclosure

c: Azedah Doherty, Sacramento Regional Transit District

"Caltrans improves mobility across California"
bc: John Holzhauser, Office of Traffic Operations – Sacramento
Steve Hetland, Special Funded Projects
Dennis Jagoda, Hydraulics
Bruce de Terra, Office of Regional and Transit Planning
Bruce Capaul, Permits
Jennifer Hayes, Community Planning
Rebecca Covington, Sacramento County Regional Planning
Ken Champion, District 3 – Sacramento County LDR Coordinator

KC/ kc

"Caltrans improves mobility across California"
December 21, 2000

LSAC186
03-SAC-99 PM 16.254
College Marketplace (P00-147)
Application

Mr. Brad Shirhall
City of Sacramento
Planning Division
1231 I Street, Suite 300
Sacramento, CA 95814

Dear Mr. Shirhall:

Thank you for the opportunity to review and comment on the College Marketplace project. Our comments are as follows:

- A traffic impact study should be prepared to assess the project's impacts in the vicinity of the Cosumnes River Boulevard-Calvine Road/SR99 Interchange. The traffic study should incorporate the following scenarios:
  
  - Existing conditions without the project
  - Existing conditions plus the project
  - Cumulative conditions (without the project)
  - Cumulative conditions (with project build-out)

- The traffic analysis should provide a Level of Service (LOS) analysis for freeways, ramps, and ramp terminal intersections. A merge/diverge analysis should be performed for freeway and ramp junctions and all analysis should be based on AM and PM peak hour volumes. The analysis should include the (individual, not averaged) LOS and traffic volumes applicable to all intersection road approaches and turn movements. The procedures contained in the 1997 Update to the Highway Capacity Manual should be used as a guide for the traffic study.

- The traffic analysis for this project should consider the need for additional right of way to widen ramps and construct added auxiliary lanes (i.e. a lengthened merge lane for the eastbound on ramp). The TIS should also focus on any necessary upgrades to ramp intersections.

- Consideration should be given to phasing the College Marketplace project "build out" with transportation improvements so as to maintain acceptable levels of service for all our transportation facilities.
Mitigation measures should be identified where the project would have a significant impact. Caltrans considers the following to be significant impacts:

- Off-ramps with vehicle queues that extend into the ramp’s deceleration area or onto the freeway.
- Vehicle queues at intersections that exceed existing lane storage.
- Project traffic impacts that cause any ramp's merge/diverge Level of Service (LOS) to be worse than the freeway's LOS.
- Project impacts that cause the freeway or intersection LOS to deteriorate beyond LOS E for freeway and LOS D for highway and intersections. (If the LOS is already “E” or “F”, then a quantitative measure of increased queue lengths and delay should be used to determine appropriate mitigation measures.

Possible mitigation measures to consider and corroborate with the traffic analysis include coordination of the following improvements with the project “build out”:

- Contributing fees to SR99/Cosumnes River Blvd.-Calvine Road Interchange improvements
- Widening interchange ramps to increase capacity
- Modifying ramp terminal intersections
- Adding auxiliary lanes between interchanges
- Increasing the ramp acceleration or deceleration lane length to improve merge/diverge operations
- Adding signalization and ramp intersection geometric improvements
- Providing freeway standard spacing of proposed project driveways from ramp intersections with preferable placement off side roads.

- Any near vicinity local road needs, with signalization and turn pocket improvements, centerline refuge areas to improve traffic operations at the project site would be of interest to Caltrans.

- The analysis of future traffic impacts should be based on a 20 year planning horizon.

- Future transportation systems assumed for cumulative conditions should only include those improvements which are included in the Sacramento Area Council of Government’s 1999 Metropolitan Transportation Plan.

- The City must consider the “ultimate” freeway facilities that will be needed to serve area growth and development. Caltrans system planning indicates the need at this location for an ultimate eight lane freeway with auxiliary lanes, high occupancy vehicle lanes, ramp merge areas and metering devices, and traffic operation system elements. Right of way for emergency pull off paved shoulders, drainage, cut slopes, landscaping, sound walls, buried utilities, ramp widenings and tapers near interchanges, in combination with the aforementioned, could require a minimum of 226 feet of corridor width with added right of way needed near interchange locations. An appropriate right of way reservation should be provided.

- Any runoff that comes from the proposed development must not contribute a contaminant load to storm waters handled by the State, for example oils, grease, sand, sediment, debris. All runoff that enters the State right of way must meet Regional Water Quality Control Board (RWQCB) standards for clean water.
Any increases of discharge into the State drainage system must be mitigated. Existing drainage patterns must be perpetuated or improved within the State right of way. Pre and post-project discharge information should be supplied for Caltrans review. Environmental Best Management Practices (BMP) should be applied to mitigate any adverse drainage impacts from the proposed development.

- Project sign plans near the SR99 freeway depicting the layout, orientation, glare intensity and size should be submitted to Caltrans for our review.

- Any work conducted within State right of way will require an encroachment permit. For permit assistance, please contact Bruce Capaul at (530) 741-4408.

Please provide our office with copies of any further action regarding this project. If you have any questions regarding these comments, please contact Ken Champion at (916) 324-6642.

Sincerely,

JEFFREY PULVERMAN, Chief
Office of Regional Planning

bc: Steve Balog, Office of Traffic Operations – Sacramento
    Navneet Singh, Office of Traffic Operations-Sacramento
    Tom Neumann, Office of Advance and System Planning
    Mike Forga, Special Funded
    Steve Hetland, Special Funded - Sacramento
    Jim Adams, Office of Right of Way Engineering
    Tom Ganyon, Office of Right of Way-Local Assistance
    Terry MacDonald, Office of Right of Way – Outdoor Advertising
    Dennis Jagoda, Hydraulics
    Bruce Capaul, Permits
    Bruce de Terra, SACOG Liaison
    Keith Rhodes, Design S-6
    Ken Champion, District 3 – Sacramento County LDR Coordinator
January 28, 2003

Brad Shirhall  
EIR Project Manager  
CITY OF SACRAMENTO  
Planning & Building Department  
1231 I Street, Room 300  
Sacramento, CA 95814

NAME OF DEVELOPMENT: College Square Project  
TYPE OF DOCUMENT: Notice of Preparation (NOP) for an Environmental Impact Report

Regional Transit (RT) staff has reviewed the Notice of Preparation (NOP) of an EIR for the proposed College Square Project and would like to provide the following comments:

Please note that these comments should be considered in conjunction with previous correspondences forwarded to the City regarding this proposal.

In our previous letters to the City, and in discussions with the project proponent, RT staff has consistently indicated that mixed use plans including housing, office, and retail are desirable at this location because they promote transit ridership.

The proposed project is located at the southeast corner of Cosumnes River College and Bruceville Road in the South Sacramento Community Plan area. The project proposes to construct 157,500 square feet of local neighborhood retail center uses (coffee house, pharmacy, restaurants, gas station, car wash,) on 20 net acres; approximately 42,000 square feet of community commercial uses located on 4 net acres; and approximately 70,756 square feet of office, child care and retail uses located on 7 net acres. This will generate approximately 890 on-site employees. Additionally, the project includes 724 senior and multi-family residential units located on 22 acres. This will generate approximately 1,210 on-site residents.

The proposal calls for an amendment to the City’s General Plan from Medium-Density Residential to Community/Neighborhood Commercial and Office, Medium-Density Residential and High Density Residential;
modification of the City's Community Plan Amendment from Special Planning District to Residential and General Commercial; and a rezone from Highway Commercial, Limited Commercial, Office Building and Residential to Shopping Center-PUD.

RT has identified the South Sacramento Corridor Phase 2-alignment extension as a priority corridor. A portion of that alignment routes the light rail tracks south of Bruceville Road and turns east (south of the proposed project site) before crossing State Route 99. A transit station that provides approximately 700 park and ride spaces has been proposed for this portion of the alignment.

The NOP states in the project description (Page 4) that there are three alternative light rail alignments and station locations being considered by RT in the vicinity of College Square. The alignment and station locations are on the west, median or east sides of Bruceville Road. The document, however, states that "for purposes of the cumulative 'future year' analysis," only the west-side alignment will be assumed.

RT maintains that all the three alignments, at this point in the South Sacramento Corridor Phase 2 analysis, have equal value and should be considered in the analysis.

The NOP also states ("Alternatives", Page 7) that a "park and ride lot and bus transfer site serving a possible light rail station would be developed on 7.3 acres in the southwestern portion of the project site in place of 240 residential units under the proposed project." While RT commends the inclusion of the proposed 7.3 acres, staff recommends that the environmental document analyze the three park-and-ride options under consideration at the Cosumnes College/College Square LRT station.

The first option would provide 1,200 surface parking spaces on College-owned property west of Bruceville Road, on property north and south of the college entrance. The second option would provide 1,200 parking spaces in a parking structure on College-owned property west of Bruceville Road and north of the college entrance. The third option would provide 500 surface parking spaces on College-owned property west of Bruceville Road and north of the college entrance, as well as 800 surface spaces immediately across Bruceville Road.

The Initial Study states (page 29) that "because the entitlements being sought under the proposed project include a General Plan Amendment, Community Plan Amendment, and Rezone, there is a potential that the proposed project could affect the light rail ridership assumed by the City and RT in their transit plans (which are based on buildout under existing General Plan land use designations and zoning)." The EIR should analyze the impacts of the project development on light rail ridership (specifically the daily transit trips) that the project would generate based upon the proposed plan amendments and zone change vis-à-vis the current zoning. The EIR should indicate whether future LRT ridership would increase or decrease if the College Square project was built.
Please note that the ability to generate high ridership figures has been a major factor in RT’s ability to secure funding for new light rail extension projects. Ridership figures for this alignment were based, partially, upon the General Plan adopted by the City, the Community Plan and land use zoning.

The Federal Transit Administration’s Technical Guidance on Section 5309, New Starts Criteria (July 2000) identifies six factors that the FTA uses to measure the degree of transit supportive land use. These are: existing land use; containment of sprawl; transit supportive corridor policies; supportive zoning regulations near transit stations; tools to implement land use policies; and performance of land use policies. Several subfactors such as mixed use development, employment and population density, parking policies, etc., have also been developed to gauge the quality of the measurement factors.

It is therefore important to indicate in the analysis whether the request to amend the City’s Plans and to change the site zoning will have a significant impact on the proposed adjacent transit station and whether this amendment will create an environment in which the proposed land uses do not support or promote high transit usage.

As development along transit/light rail corridors occurs, land uses that are compatible with transit will be critical in RT’s effort to maximize transit usage. RT’s policy prefers to “locate mixed use, high intensity developments in areas surrounding existing, programmed and adopted light rail and bus transit corridors according to specific site design guidelines” (Page 7-10, Transit Master Plan).

Further, the Initial Study suggests that “the project as planned would be ‘overparked’, meaning that the applicant proposes more parking than required by City Code, which could conflict with the City’s alternative transportation goal.” (Page 29). RT generally encourages establishment of incentives such as reduction in parking in order to increase transit usage. Because parking generally competes with transit, RT encourages restriction of parking around commercial development that has access to light rail stations or transit corridors (RT Transit Master Plan, page 7-22). As stated in the Initial Study document, the EIR should evaluate the consistency of the proposed project with transit plans and policies of the City and RT with regards to parking spaces proposed for the development.

As part of the South Sacramento Corridor Phase 2 Study, RT is examining the possibility of locating a light rail maintenance facility in the vicinity of the College Square Project, off Cotton Lane (please see enclosed map). The EIR should consider the impacts of locating a maintenance facility at this site in its analysis.

In summary, RT would like the following areas to be adequately analyzed in the EIR:

1) The EIR should address all the three possible light rail alignments and station locations along Bruceville Road presently being considered in the South Sacramento Corridor Phase 2 Study;
2) The EIR should analyze and provide an estimate of proposed park and ride spaces for the three possible alignments.

3) The EIR should analyze the project's impact on transit ridership (specifically, the daily transit trips) that the project would generate based upon the proposed plan amendments and zone change vis-à-vis the current zoning. Additionally, the EIR should investigate whether the proposed amendments will create an environment in which the proposed land uses do not support or promote high transit usage.

4) The EIR should indicate whether future LRT ridership would increase or decrease if the College Square project was built.

5) The EIR should examine the consistency of the proposed project with transit plans and policies of the City and RT with regards to parking spaces proposed for the development.

6) The EIR should consider the impacts of locating a maintenance facility at this site in its analysis.

7) Additionally, the EIR should evaluate the potential traffic impacts on circulation patterns in the project area particularly as it relates to the movement of buses.

8) The EIR should address the potential of mitigating traffic and transit impacts during the construction stages of the project. Strong connectivity and ease of transit mobility during the construction stages should be emphasized.

Thank you for providing RT an opportunity to review this project. If you have any further questions regarding these comments and recommendations, please contact Taiwo Jaiyeoba, Senior Planner at 321-2870 or tjaiyeoba@sacrt.com.

Sincerely,

[Signature]
Azadeh Doherty
Planning Manager

c: Mike Wiley, Director of Customer Services, RT
    David Melko, Policy & Program Manager, (Project Manager, South Sacramento Corridor Phase 2), RT
    Don Smith, Assistant Project Manager, South Sacramento Corridor Phase 2
    Maureen Daly Pascoe, Real Estate Administrator (TLC Coordinator), RT
    Taiwo Jaiyeoba, Senior Planner, RT
    Thomas Pace, Senior Planner – South Area Team, City of Sacramento
Mr. Brad Shirhall, EIR Project Manager  
City of Sacramento  
Planning & Building Department  
1231 I Street, Room 300  
Sacramento, CA  95814

RE: Notice of Preparation (NOP) for an Environmental Impact Report –  
College Square Planned Unit Development – Application No. P00-147

Dear Mr. Shirhall,

The North Laguna Creek Neighborhood Association is glad to have the opportunity to comment on the Notice of Preparation process for the College Square project identified above.

For the record the Association would like to mention two very important noticing requirements that were not performed efficiently during the City of Sacramento’s NOP process: 1) The Association was not officially notified of the NOP meeting scheduled for January 22, 2003, nor was the President of the Association personally notified well in advance of such meeting; 2) The NOP meeting was not scheduled in the immediate vicinity of the project, therefore no community members were present except two members of the Association that were notified indirectly by a third party. It is extremely important that parties living near or adjacent to the proposed project be notified of the NOP process to allow for sufficient time for review and comment on proposed studies to be undertaken by the City in preparation of the environmental impact report.

1. The project proposed is located on 63 gross acres of vacant land immediately adjacent to Hwy 99 Calvine/Consumnes River Boulevard interchange. A large portion of the project is proposed Highway Commercial. Therefore, the EIR should consider the cumulative impacts of peak hour AM/PM traffic, noise, and air pollution upon the Hwy 99 intersection and surrounding land uses to the West, in conjunction with the proposed
project. The EIR should include in the Study Scope, the potential widening of Bruceville Road to six lanes, as well as, the City draft EIR currently in process for the Cosumnes River Boulevard “punch through” from Interstate 5 to Hwy 99, all major and local surface streets, such as, West Stockton Boulevard.

2. The project as proposed includes up to 270,256 sq.ft. of Highway Commercial, neighborhood retail and community commercial on 51 net acres including 70,756 sq. ft. of office, childcare and retail uses for approximately 26 commercial buildings for a range of up the 45 feet in height. This project include the extension of the South Line Light Rail. The potential growth inducing impacts associated with the commercial component of this project are significant. Therefore the EIR process should consider a “reasonable alternative” to reduce the commercial component of the project and consider reducing parking requirements and instilling parking restrictions to include “underground” parking, as well as, combining a mixture of land uses adopted in TOD land use concepts currently published by the Department of Transportation in the Statewide Transit-Oriented Development Study and RT’s Transit for Liveable Communities Study for ways to reduce the potential impacts from heavy vehicular uses.

3. The project site planning should be reviewed using a reasonable range of alternatives to reduce the impacts of runoff, traffic, air quality and noise by using narrower streets, wider sidewalks, increased vegetation and trees to landscape and shade the project. The project alternative design should provide more connectivity between the commercial component and residential component so as to reduce reliance upon vehicle use and increase the “walkability” to the nearby proposed Light Rail Station. The introduction in the project of more greenspace, wider landscaped corridors, landscaped berms and inclusion of a larger park design to serve the 724 senior and multifamily residential units proposed. A reasonable alternative to site planning should incorporate a mix of uses of residential to include, cluster single family, condominiums, and townhouses with underground parking so as to encourage walkability and achieve the land uses proscribed in transit oriented development.

4. Future South Line Light Rail expansion, including a station on the west or east side of the project (including a bus terminal station) should be considered as a reasonable alternative study for multi-modal use in the DEIR. Such site design would reduce the impact of VMT, air and noise attenuation. Alternative site planning could include adequate street design, rolled curbs, and traffic crossing devices to encourage walkability and connectivity to the adjacent land uses, such as, the nearby Consumnes River College. The DEIR should include greater coordination with RT for the Southline LR project, including a layout of the proposed station buildings and bus stops stations, with appropriate bicycle/pedestrian connections.
Thank you for the opportunity to provide comments during the NOP process. Please inform the North Laguna Creek Neighborhood Association of your responses, as well as, the providing a copy of the Draft Environmental Impact Report upon completion.

Sincerely,

[Signature]

Angela Torrens, President
North Laguna Creek Neighborhood Association
January 30, 2003

Mr. Brad Shirhall  
EIR Project Manager  
City of Sacramento  
Planning & Building Department  
1231 I Street, Room 300  
Sacramento, CA  95814

Re: College Square (P00-147) -- Notice of Preparation for an Environmental Impact Report (EIR NOP)

Dear Mr. Shirhall:

On behalf of College Marketplace, LLC, developer of the College Square project, thank you for the opportunity to comment on the College Square EIR NOP. My client and the rest of the College Square project team look forward to continue working with the City in the processing of our application, and to bring a high quality transit-oriented, mixed use project to the South Sacramento community.

Our only comment on the EIR NOP is to the project objectives section. As set forth in our application, the specific College Square project objectives to be included in the College Square EIR are as follows:

1. Provide an urban infill project focused on needed neighborhood and community retail services, to support the City's jobs-housing balance goals and to address air quality objectives by incorporating Light Rail into its overall circulation system. The design complements future employees on the project site, students at Cosumnes River College, local residents and future high-density residential uses.

2. Provide neighborhood and community serving retail for the South Sacramento community that is in close proximity to existing and future residents, Cosumnes River College, area hospitals, and the traveling public. The project located adjacent to major arterials and Highway 99 will have enhanced visibility and appeal that will assure the project's long-term success.

3. Provide a major employment center immediately adjacent to Cosumnes River College, Highway 99, zoned high-density residential uses, light rail and the nearby senior housing developments.
4. Provide a retail center of significant size to serve South Sacramento residents and the surrounding community.

5. Provide a location for a future Light Rail station. The station is expected to be located close to the center of the Cosumnes River College campus and adjacent to the retail center of the College Square project, zoned high-density residential uses, and within walking distance of both residents and students.

6. Provide a more cost effective Light Rail alignment for the Regional Transit District. This will be accomplished through the dedication of a portion of the required Light Rail right of way along the southern boundary of the College Square site.

7. Provide a more cost effective location for the future park and ride lot. The conceptual park and ride lot will be located near both the main activity center of Cosumnes River College, future high density residential uses and future retail uses.

8. Provide an opportunity for a multi-use transit center, for Light Rail, bus connections and pedestrian and bicycle usage.

9. Provide utility line extensions into an area that is presently unserved. The utility extensions will particularly benefit zoned multi-family parcels to the south of the project, which cannot be developed without the needed utility connections at Bruceville Road and Cosumnes River Boulevard.

We appreciate the opportunity to comment on the College Square EIR NOP.

Very truly yours,

SANDBERG & LO DUCA

Marcus J. LoDuca

MLD/tb
cc: Doug Sutherland
    Bradley Cutler
    Richard Sambucetti
Appendix D

Comments Received at the Public Scoping Meeting
COLLEGE SQUARE ENVIRONMENTAL IMPACT REPORT
PUBLIC SCOPING MEETING

PUBLIC COMMENTS

WEDNESDAY, JANUARY 22, 2003
6:30 P.M.

MEADOWVIEW COMMUNITY CENTER
SACRAMENTO, CALIFORNIA

REPORTED BY: ESTHER F. SCHWARTZ
CSR NO. 1564

CAPITOL REPORTERS (916) 923-5447
APPEARANCES

FOR THE CITY OF SACRAMENTO:

BRAD SHIRHALL

EDAW:

ROBERT HILMAN
HOLLY KEELER

DEVELOPER:

BRADLEY CUTLER

AUDIENCE:

ANGELA TORRENS
LAURA LEAVITT

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SACRAMENTO, CALIFORNIA

WEDNESDAY, JANUARY 22, 2003, 6:30 P.M.

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(Presentation having been given previously.)

MR. SHIRHALL: We have one speaker slip filled out by
Angela Torrens, from the North Laguna Creek Neighborhood
Association, who wishes to get up and speak about the work.

Please come up here, if you would.

MS. TORRENS: I am Angela Torrens, president of the
North Laguna Creek Neighborhood Association. Laura Leavitt
and I for well over ten years have been together. We follow
the development and transportation community issues in our
area for quite a long time.

Our association borders are north of Sheldon Road, east
of Franklin Boulevard, south to Cosumnes River Boulevard,
east of 99 -- west of 99. So, as you can see, if you take
into consideration that the boundaries we established over
the years that we have worked in the community from marking
boundaries. There are a number of typical uses in the
community that really should have a very particular active
role in this particular project and that unfortunately has
not happened tonight.

We've got Valley Hi High School in our boundaries and
we've got the community college which is Cosumnes River
Community College in our boundaries and we've got more than
2,000 residential structures.

Am I correct on that?

MS. LEAVITT: Yes.

MS. TORRENS: That is not to include the residential structures that are under construction directly south of this project.

Our association has talked with the developers several times, and he's very nice to accommodate and to discuss with us various issues and concerns that we have. We have spoken to planning and worked with Brad Shirhall in the past and very happy to see that they have been willing to speak to us and provide us with information and resources so that we can take a look at this project much closer than we would other projects that wouldn't necessarily entail the Light Rail expansion.

We followed the south line of the Light Rail expansion project all last year. Laura Leavitt, our former president, followed the expansion as well as the current environmental process that they will be entering for the south line Light Rail expansion to the boundaries behind Cosumnes River College. I think one thing I want to notice right offhand that has caused great concern for me is the noticing process for this NOP process. I unfortunately received notice on the NOP process directly from the Councilwoman Parnell's office. That was date stamped November 24th. I wonder why
I didn't get a personal copy. I have a P.O. Box. They have my home address as well as Laura's home address. There was some type of mixup, so I didn't receive a notice that would give me enough time to notify the community. I currently don't have resources to notify the community. I do know the community would be very, very interested in this project. I have discussed it with community members in the past, but never to this detail, never at this juncture with you as experienced on the environmental phase.

So I guess one of my first requests as neighborhood association president would be to have this particular meeting, this NOP meeting, in the immediate vicinity of the project so our community would have the opportunity to come out and take a look at it, to listen to the various professions that are here that can present the various concepts and planning ideas and environmental ideas that are entailed in this project. And so I want to make that my first request, that we have this meeting continued to an area that would be in the vicinity of our community. One of the several focus points that we have used is the elementary school. We have a number of our community meetings there. Councilwoman has been a very good access point for members to come out and provide their input, as we have very active members who are interested in what is going on.

In the discussion that we had concerning this project,
so many of the issues that are prevailing issues that are still unresolved are the transit oriented development issues that we have wanted to see incorporated into the project. We looked at transit oriented development in the past year, two, three years. Laura and I have both gone to see them. We visited them. We have done research. We realize that the transit oriented development idea is a positive approach, and we looked at some of the particular site plans for this particular project and we feel considerable input that needs to be had, especially from the community, not from Laura, but from the entire community.

We have also followed some existing projects that have come into the area. That is Strawberry Creek Project that came in just recently, approved by the City on the northern portion of Cosumnes River Boulevard and Bruceville Road intersection. We are concerned about the cumulative impact of this project. It is our concern to make sure to ensure that the scope of the environmental study will extend to uses on all sides of the intersection that are currently issues on the City of Elk Grove site, which would be west of 99 that are developing out as we speak.

There is a large mega campus that are currently under construction. There are a number of projects on the city side that are going to and should be discussed in whole as they effect this project. One would be the Cosumnes River
Boulevard punch through. The others would be the listed
projects that were sent to me by Councilwoman on Bruceville
Road widening, Consumnes Boulevard extension, Sheldon Road
interlink and a number of major thoroughfares that affect
the livability and vitality of future projects.

And so my concern for the neighborhood, at least at
this point, is to make sure your environmental process will
extend to these existing uses and proposed uses. And
secondly, I think that basically some of the cursory review
of this project and our discussions with the developer.
There a number of things of the project that we are -- we do
not feel meet the transit oriented development concept. And
understanding that a portion of this project is commercial
and understanding that a portion is just alternative for a
transit station, we have to take into consideration the
phase and the level of discussions that are going on right
now in RT to extend the Light Rail behind the project.
There are apparently some alternatives that are existing
now. Discussions concerning application of a Light Rail
station would have some impact on how this project is built
out. We have made a case several times in our discussion
with city staff as well as the developer that we would like
to see some very, very good mix use components in here.
Some of the mix use components that we have mentioned before
that we have not seen directly in just the multifamily
portion of the project, the mix use -- live, work, condominiums, townhouses or anything above retail that would in any way fit the transit oriented concept.

I understand this project is not subject to a transit overlay zone, so I think our approach here is to be more meticulous than normally would be because the zoning is in question here. The city zones currently for this project made originally in the community called for residential.

But I think that if you take into consideration the transit oriented concept here and how it can work in this particular project and work from successfully for the south area, we would want definitely to look at those TODs now that are available Internet wide just about anywhere that two describe components of how commercial and residential can work together with the pedestrian walkways interconnectivity and plants can work to make this project a fully functioning project and a successful one. We are not at that step now.

Right now in the environmental process I have some serious concerns about, first off, the community not having the ability yet to provide input on this project. The idea that we have not fully discussed transportation plans surrounding this project, we have not fully discussed how transportation would work, where parking would work, where residential would work in concert with the commercial that is being proposed. We are talking about a project right now that
would have increased vehicular impact in an area right now that is truly impacted by vehicles. We have a college that is servicing thousands of students that commute on Bruceville Road via 99 freeway. They currently don't have a place to go. Currently Bruceville Road is backed up. Unfortunately we are not able to get into the neighborhood as we speak. It is very difficult for us to try to visualize the accepted project unless we have some assurance there would be solid transportation plans involved here that would not only deter traffic, but deter vehicular use and encourage the workability of pedestrian oriented use. The types of uses that some of them are would encourage some pedestrian uses. That would be your senior assisted living and your senior independent living complex.

The project as is now is currently devoid of any green space. There is no internal park involved in this project. There are concerns that we have regarding the amount of commercial versus the amount of business, that is job generating types of businesses, that would encourage the increasing jobs, some of the concepts that have already been developed by RT and transit for livable communities have not been fully developed in this project. Therefore, we have concerns, as it is presented here and as proposed, upon the impacts it would have on traffic and the ability for it to fully function as a project and reduce vehicular use and
increase walkability. We are not quite at that phase yet and I think as a neighborhood we need to have a full discussion. We have the full discussion. We haven't had that opportunity yet. I am going to make that case now, that I think one of the things which we can do as a group is have a full discussion on this project. The NOP process is very stringent. It gives us so many days to respond, but we haven't got enough community input to give you a full response. It is not fair to the community for me to write a letter on their behalf when they haven't had an opportunity to be involved in the project.

It was first introduced, I believe, at a community meeting that Bonnie Parnell had, and it was given probably less than a couple of minutes. If there is a project going into our area, we need to take a look at the consideration of possibly causing a great deal of what I would call future impacts to the area that need to be looked at and mitigated very carefully.

We have, as I said, the build-out of a number of residential units and Cedar Creek is going to increase not only the current congestion that we have on the roads but probably just going to create gridlock. I don't think the community is going to buy into it unless ensured of a smooth transportation plan that is going to work for this project when eventually designed. And they are going to be able to
avail themselves of the services that they project is
proposed. And that this project also could serve more uses
than are originally proposed. We don't see things
incorporated into the project that would serve the students
and the college.

I don't know what the college position on the project
is. I know the college is concerned about the Light Rail
station, the future alignment of the Light Rail station and
all that has. This project is going to be blended in with
those plans that are currently under review by RT. So it
is our concern that without having a whole picture, not
seeing the whole project, we are not -- Laura and I are not
convinced it is going to be on a positive impact.

Is there anything else I need to say?

MS. LEAVITT: I don't believe this is going to be
conducive to Light Rail use. That is a major issue.

MS. TORRENS: One of the purposes of the Light Rail
studies and what purposes that RT incorporated in the
studies is to increase ridership. I think that we need to
move that a little further on this design, this site plan,
to get to a point where we have said it is going to increase
ridership. That goes to the vitality of the Light Rail
system, and we want that to work well in that area. I
cannot wait for it for it to come, cannot wait.

Is there anything else I missed other than mentioning
for the major component, the multifamily that we had
concerns, lack of mixed residential and lack of business
professional?

Then I'm done. I'm done for now.

Thank you.

MR. SHIRHALL: I am not sure if Ms. Leavitt has
anything to add tonight?

MS. LEAVITT: No.

MR. SHIRHALL: If anybody wants to get up, add input,
you are welcome.

I think that closes our public comment period, and if
you do have more to add and you want to drop something in
the mail to us, that is fine. The information is here, give
me a letter. You can fax it to me. Certainly talk to you
on the phone, too.

Thank you very much.

(Public comment period adjourned 7:10 p.m.)

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REPORTER'S CERTIFICATE

STATE OF CALIFORNIA  )
COUNTY OF SACRAMENTO ) ss.

I, ESTHER F. SCHWARTZ, certify that I was the
official Court Reporter for the proceedings named herein,
and that as such reporter, I reported in verbatim shorthand
writing those proceedings;

That I thereafter caused my shorthand writing to be
reduced to printed format, and the pages numbered 3 through
12 herein constitute a complete, true and correct record of
the proceedings.

IN WITNESS WHEREOF, I have subscribed this certificate
at Sacramento, California, on this 29th day of January 2003.

ESTHER F. SCHWARTZ
CSR NO. 1564

CAPITOL REPORTERS (916) 923-5447
Appendix E-1

Preliminary Drainage Report
COLLEGE SQUARE

PRELIMINARY DRAINAGE REPORT

December 5, 2002

Prepared By:

Doucet & Associates, Inc.
3300 Douglas Blvd., Suite 475
Roseville, California 95661
Phone: 916-780-2005
Fax: 916-780-2015
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INTRODUCTION

This Drainage Plan was prepared to facilitate the development of the proposed College Square Commercial Project. The plan considers the drainage area that lies north of Shasta Avenue and Cotton Lane, east of Bruceville Road, west of Highway 99 and south of Cosumnes River Boulevard (see Figure 1). The total Watershed area is approximately 117.5 acres. Part of it includes a portion of the Jacinto Creek planning area. According to the Jacinto Creek Master Drainage Study, this area is planned to drain north to Strawberry Creek. The contributing watershed area considered for this storm drainage plan is delineated as Watershed 1 in Figure 3 of The Jacinto Creek Planning Area, Drainage Master Plan (4/15/96) prepared by Ensign & Buckley Consulting Engineers. Figure 3 has been enclosed in Appendix F for reference.

The College Square Commercial project occupies the northerly 63.05 acres of this +/-117.5 acre area. The College Square project is bordered by Bruceville Road on the west, Highway 99 on the east, excluding the City of Sacramento wetland mitigation area, and Cosumnes River College Boulevard on the north. The west half of the southern property line falls approximately 670 feet south of the proposed intersection of West Stockton Boulevard and Bruceville Road. The east half of the southern property line falls approximately 190' north of Cotton Lane. See Figure 2.

The entire 117 +/- acre watershed area is fairly flat. Portions of it drain to the northwest towards Strawberry Creek and Union House Creek. Other portions drain westerly towards
Bruceville Road where they enter an existing inadequate ditch system which feeds into a 12" diameter storm drain system in Bruceville Road. The 12-inch drain is conveyed westerly through Cosumnes River College to a pump station. A larger portion of the Jacinto Creek study area south of Cotton Lane flows westerly towards Bruceville Road into the open ditch system and then southerly towards Jacinto Creek.

The Jacinto Creek Master Drainage Plan established pipe sizes and box culvert sizes to drain the entire 117 acre watershed area. The hydraulic grade lines and energy grade lines for this drain system are very flat as the southern most extremities of the drainage area, which lie within the Jacinto Creek Planning Area, are only 3 feet +/- above the intersection elevation of Bruceville Road and Cosumnes River College Boulevard. The Jacinto Creek Drainage Master Plan indicates that the discharge point of the storm drain system would be Strawberry Creek just east of the intersection of Bruceville Road and Cosumnes River Boulevard.

During review of the Jacinto Creek Storm Drainage Master Plan, it was observed that the drainage outfall water surface elevation at Strawberry Creek was significantly higher than the connection point of Strawberry Creek to Union House Creek. The primary reason for this significant 4.5 feet increase in water surface elevation is the existing drainage chute, which connects Strawberry Creek to Union House Creek. After researching the locations of the existing underground pipeline facilities in Cosumnes River Boulevard and Bruceville Road, it was determined that a new storm drain system could be constructed across Cosumnes River Boulevard west of Bruceville Road. This storm drain outfall could take advantage of the lower water service elevation in Union House
Creek and provide additional hydraulic gradient, which would enable the use of smaller pipes than the underground drainage system proposed by the Jacinto Creek Master Storm Drain Plan.

ALTERNATIVE S

Based on the findings of the original draft prepared by Doucet & Associates, Inc. and submitted March 2002, options including a sump pump were found to be less dependable, less efficient and more costly. Therefore, two alternatives are being proposed. The drainage outfall for both alternatives is at Union House Creek which is approximately 400 feet downstream from the intersection of Bruceville Road and Cosumnes River College Blvd. Figure 3 shows the proposed storm drain layout and tributary drainage areas.

Alternative One: Alternative 1 is a gravity trunk drain system that accommodates developed flow rates for the College Square area and existing flow rates for the offsite area tributary to the system. This alternative assumes that the 54.45 acres offsite tributary area south of College Square will incorporate detention ponds, which will release flows at a rate equal to or less than the existing conditions. Refer to Appendix A for the associated runoff calculations using the Sacramento Method as outlined in Sacramento City/County Drainage Manual Section 11. Water quality treatment will be provided for College Square by routing runoff from the parking areas through grassy swales. Off-site water quality mitigation may be achieved through water quality ponds or grassy swales.
Alternative Two: Alternative 2 is also a gravity trunk drain system that accommodates developed flow rates for the entire tributary area without detention. The area south of College Square is expected to be developed as a medium density residential usage and a park. A value of 70% impervious cover was used for the medium density residential areas and a weighted value of 53.3% was used for the park area/multifamily watershed area. Refer to Appendix B for the associated runoff calculations.

Storm Drain Pipe Sizing

The storm drain system was developed in accordance with the Sacramento City Storm Drainage Design Standards. Tables including pipe size, inverts and cover may be found in Appendix C for Alternative 1 and Appendix D for Alternative 2. Key features include the following: The invert of 13.00′ at the outfall is not at the channel bed. The pipe had to be raised to avoid conflict with the existing 102″ and 108″ diameter sanitary sewer pipes running parallel to Union House Creek in this area. The hydraulic grade line (HGL) is a minimum of 6″ below the top of the inlet at every node in the system per the City of Sacramento requirements. The HGL at the outfall was set to 20.0′ to coincide with the expected water surface elevation in Union House Creek in a 100 year storm event. This value was derived from the 100 Year Water Surface Elevation (WSE) information provided by the Army Corp of Engineers for Union House Creek. The tie in location is located between Alpine Frost Drive (WSE 20.2′) and Center Parkway (WSE 19.32′).

The main difference between the two alternatives is the size of the main pipes. Typically, the pipes for Alternative 2 are one pipe size larger than Alternative 1. Given the current price of land in this
area, it will be more cost effective to increase the pipe size than to provide onsite detention ponds on the contributing properties to the south.

Comparative Costs Of Alternative Plans

PRELIMINARY OPINION OF PROBABLE COST OF GRAVITY TRUNK DRAIN SYSTEMS:

<table>
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<th>Trunk Drainage Plan Alternative:</th>
<th>Cost:</th>
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<td>Alternative 1</td>
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<td>Alternative 2</td>
<td>$979,694</td>
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Appendix E contains a detailed Opinion of Probable Cost for each option.

Analysis and Recommendations:

1. Outfall: Pursuant to the Jacinto Creek Master Drainage Plan study, the City of Sacramento has required all flows from Shasta Street north to Cosumnes River Blvd be piped northwest to Strawberry Creek. A downstream connection to Union House Creek provides a more effective hydraulic design than a connection to Strawberry Creek. The downstream connection to Union House Creek is the recommended discharge point for this watershed.

2. Detention: Based on the land costs in this area, it appears that oversizing the storm drain pipes for the expected peak runoff is more cost effective than providing onsite detention ponds. The cost of the
resulting drain system should be shared by all the properties on a pro-rata share basis.

3. **Water Quality Treatment:** Water quality treatment will be provided through onsite grassy swales for the College Square project. Water quality treatment can be provided by utilizing grassy swales or water quality treatment ponds for the tributary areas south of College Square.

4. **Recommendation:** Based on the above, we recommend that Alternative 2, storm drain sizing for the ultimate developed unmitigated flows be constructed.
### ALTERNATIVE 1

**10 YEAR EVENT**

OFFSITE FLOWS MITIGATED TO PRE-PROJECT CONDITIONS (DETENTION)

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# ALTERNATIVE 2

## 10 YEAR EVENT

DEVELOPED FLOWS OFFSITE
(NO MITIGATION I.E. NO OFFSITE DETENTION)

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Alternative 1 (Offsite Detention)

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contingencies, engineering, inspection fees 35%

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$278,335.75

### TOTAL ESTIMATED COST:

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Preliminary Opinion of Probable Cost
Alternative 2 (No Offsite Detention)

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Appendix E-2

Project Drainage Report
College Square Project Drainage Report

Prepared for:

Doucet and Associates, Inc.
3300 Douglas Boulevard Ste 475
Roseville, CA 95661

Prepared by:

July 2003

Mead & Hunt
College Square Project Drainage Report  
July 2003

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Appendix B: HEC-RAS Output Listing
Appendix C: Storm Drain Analysis
Table C-1: Master Plan
Table C-2: Alternative 1 – College Square Without RT Station
Table C-3: Alternative 2 – College Square With RT Station
1.0 Introduction
In 1996, Mead & Hunt, Inc., formerly Ensign & Buckley, prepared a drainage master plan for the Jacinto Creek Planning Area (JCPA). The master plan defined the drainage improvements necessary to allow development of the planning area and also evaluated potential impacts of development on the receiving waters downstream. The planning area covers 500 acres within the city of Sacramento (Figure 1). Approximately 382 acres of the site drains to Jacinto Creek and 118 acres draining to Strawberry Creek, which joins with Unionhouse Creek approximately 600 feet downstream from the project. The area draining to Strawberry Creek was defined as Watershed 1 and, at the time of the master plan, the proposed land-use within this area was mostly medium density residential with some recreation and public use areas (Figure 2). The College Square Project proposes to construct a commercial/retail and a medium density residential project within Watershed 1 (Figure 3). Additionally, the Sacramento Regional Transit District is proposing to construct a light rail station within the watershed. These projects will change the land-use plan that was the basis of the master plan. As a result, Doucet and Associates, Inc. have asked Mead & Hunt to evaluate the effects of these projects on the master plan. Descriptions of the specific tasks that were performed are provided below.

- **Task 1**: Calculate the revised 10-year flows, hydraulic grade lines, and velocities within the storm drainage pipe system for Watershed 1

- **Task 2**: Calculate the revised 100-year flow from Watershed 1 into Strawberry and Unionhouse Creeks to determine the effect on the ultimate peak flow in the creeks

- **Task 3**: Clarify whether or not the water quality basin proposed within Watershed 1 was intended to provide flood control benefits

A more detailed description of the above tasks is provided below.

2.0 Task 1: Storm Drainage Pipe System Calculations

2.1 Calculate Revised 10-year Flows
The *Sacramento City/County Drainage Manual, Volume 2, Hydrology Standards*, dated December 1996 (Drainage Manual), SACPRE, and the HEC-1 computer program were used to develop the 10-year flows used to compute the hydraulic grade lines, and velocities for the Watershed 1 storm drainage pipe system. The following subsections describe the hydrologic methods and parameters used in the analysis.

Two different scenarios were considered as described below:

- The College Square site was assumed to be developed per the current proposed plan and the land-use for the remainder of the watershed was based on the original land-use shown in the master plan (HEC-1 model: CSALT1X.DAT).
The College square site and the Regional Transit light rail station site were assumed to be developed as currently proposed and the remainder of the watershed was based on the original land-use shown in the master plan (HEC-1 model: CSALT2X.DAT).

2.1.1 **Subbasin Delineation:** Watershed 1, bounded by Bruceville Road, Shasta Road and Cosumnes River Boulevard and Highway 99, consists of approximately 118 acres. The watershed naturally drains into Strawberry Creek. Subbasin drainage boundaries for College Square and the Regional Transit light rail station were delineated and areas computed by Doucet and associates, Inc. The subbasin areas for the rest of the watershed were adopted from the JCPA master plan study (Table 1).

2.1.2 **Land Use:** The College Square Project proposes to construct commercial/retail and medium density residential lots as shown on Figure 3.

2.1.3 **Unit Hydrographs:** The unit hydrographs defining the runoff response of each subbasin were developed with the SACPRE accompanying the Drainage Manual. The “travel time” approach was selected for determining the basin lag because it was concluded that the “basin n” approach would compute unrealistically short lag times as a result of the small subbasins. The parameters used in developing the basin lag were as follows:

**Overland Travel Time**

- Commercial: 3 minutes
- Residential: 9 minutes
- Gutter Travel Time: 2 minutes
- Storm Drain Travel Time: Based on 2.5 feet per second (fps)

The resulting travel time components and the basin lags are summarized in Table 1. The basin lag for the 100-year event includes a factor of 1.3 applied to the Storm Drain Travel Time to reflect that the 100-year flows will exceed the storm drain capacity and will likely travel slower in the roadways, or overland release paths, than in the storm drains system.

2.1.4 **Precipitation and Infiltration:** A 6-hour storm was developed using SACPRE. The initial loss, constant loss rates, and the percentage of impervious area were developed with SACPRE based on the land use of each subbasin.

2.1.5 **Routing:** Routing through the storm drains utilized the Muskingum Cunge method.
### TABLE 1
HYDROLOGIC PARAMETERS

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<th>SUBBASIN</th>
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<th>AREA (M²)</th>
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<td>P/QP²</td>
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</table>

¹ Equal proportions assumed for subbasins with multiple land uses
² QUASI-PUBLIC land use assumed to have the same as RECREATIONAL land use

D = LOW DENSITY RESIDENTIAL (50% impervious)
M = MEDIUM DENSITY RESIDENTIAL (70% impervious)
M/LD = MEDIUM (70% impervious) LOW DENSITY RESIDENTIAL (50% impervious)
P = PARKS (10% impervious), RECREATION (5% impervious), COMMERCIAL & OFFICE (90% impervious)
N,C,O = COMMUNITY NEIGHBORHOOD (75% impervious), COMMERCIAL & OFFICE (90% impervious)
P = PUBLIC (10% impervious) AND QUASI-PUBLIC (5% impervious)
OD = Transit-Oriented Development
2.2 Calculate Hydraulic Grade Lines and Velocities

The storm drain analysis for the College Square Project was based on the pipe system proposed in the original master plan except that the outfall was extended to Unionhouse Creek, and losses due to the water quality basin proposed in the master plan was not considered since a water quality basin will not be used. The master plan storm drain sizes were determined in accordance with the Sacramento City Storm Drainage Design Standards (City Standards), with some exceptions, as described below.

2.2.1 Criteria: The City Standards require that the hydraulic grade line (HGL) calculations in the trunk drainage pipes be based on peak 10-year flows, assuming a coincident 100-year water surface in the receiving open channels. However, in light of the refinement of flows and hydraulics in the receiving streams, the City based the design on 10-year flows coincident with 10-year peak water surface elevations.

The City Standards require that the 10-year HGL be at least 6 inches below the street drain inlets. Because the master plan only defines the trunk drainage pipes, the goal of the analysis was to provide at least 2 feet of freeboard to existing grades. This was considered adequate to provide for additional lateral street drains.

The City Standards prefer that the invert of the outfalls be at, or above, the 10-year water surface elevation of the receiving channel. This was not possible because of the flat ground slopes and high 10-year elevations. The proposed flow lines at outfalls were based on providing 2 feet of cover on the culverts. The result is that some outfalls are only slightly above the invert of the receiving channel.

2.2.2 Methods and Parameters: The HGL was developed assuming pressure flow. The following parameters and methods were used:

- Manning’s n: 0.015
- Outfall loss: 1.2 velocity head loss for the proposed outfall, which was assumed to be fitted with a flap gate.

2.2.3 Tailwater of Receiving Streams: The tailwater of the receiving streams are summarized in Table 2.

<table>
<thead>
<tr>
<th>Unionhouse Creek</th>
<th>Water Surface Elevations in Unionhouse Creek</th>
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<td>Frequency</td>
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</table>

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4
The 100-year HGL in Unionhouse Creek was developed using the existing conditions (1995) land-use flows with the proposed South Sacramento Streams Group Project. Specifically, the discharge in Unionhouse Creek, from Strawberry Creek to Morrison Creek, ranged from 2254 cfs to 2489 cfs. The future 100-year flows with South Sacramento Streams Group Project detention are only slightly higher than the exiting flows ranging from 2265 cfs to 2525 cfs.

2.2.4 Results: The storm drain sizes, manhole locations, and 10-year flows are shown on Figure 4. The resulting flows, HGL's, velocities, and the master plan HGL's are shown on Table 3. The results show that the proposed development will not increase HGL's at the upstream ends of the storm drain trunk line at MH1042 and MH1070. There will be a slight increase at MH1051 but that location is within College Square project.

<table>
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<tr>
<th>NODE</th>
<th>PIPE DIAMETER</th>
<th>PIPE LENGTH</th>
<th>MASTER PLAN HGL</th>
<th>ALTERNATIVE 1 - COLLEGE SQUARE WITHOUT RT STATION HGL</th>
<th>INCREASE IN HGL</th>
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1 10-year water surface elevation in Strawberry Creek
2 10-year water surface elevation in Unionhouse Creek
3 Distance from Bruceville Road to Unionhouse Creek downstream of Strawberry Creek confluence
Table 4 shows that the proposed Regional Transit light rail station would increase the 10-year flows between 1 and 2 cfs. The effect on the HGL is approximately 0.1 foot.

Table 4
Comparison of 10-year Peak Flows for College Square

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<th>College Square WITH RT Station (cfs)</th>
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3.0 Task 2: Impact on 100-year Flow in Unionhouse Creek
The impact of the College Square project on the 100-year discharges in Unionhouse Creek was evaluated based on using HEC-1 models that were prepared by CDM for the South Sacramento Streams Group Project. No modifications were made to these models other than updating the subbasin containing the College Square site. The impacts of the project were evaluated for the same two land-use scenarios described in Task 1 (HEC-1 models: UH24ALT1.DAT and UH24ALT2.DAT). Table 5 shows that the College Square Project will result in a reduction of approximately 45 cfs to 50 cfs in the 100-year flows in Unionhouse Creek.

Table 5
Impact of College Square Project on Unionhouse Creek 100-year Flows

<table>
<thead>
<tr>
<th>Location</th>
<th>Existing</th>
<th>College Square WITHOUT RT Station</th>
<th>Impact of College Square Alone</th>
<th>College Square WITH RT Station</th>
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<td>Below Strawberry Creek</td>
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<td>-45</td>
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Development within Watershed 1 will result in a reduction of the 100-year flow in Strawberry and Unionhouse Creeks due to timing differences between pre-project and post-project conditions and the reduction of the watershed area from 0.43 square mile to 0.33 square mile.

4.0 Task 3: Water Quality Basin and Flood Control Benefits

The original master plan proposed a water quality detention basin in Watershed 1. A weir and an 18-inch pipe were proposed to divert low flows from the storm drain system into the water quality basin and the treated flow would return to the storm drain system in a 12-inch pipe (Figure 5). It was determined that approximately 5.7 acre-feet would have to be stored to satisfy the optimum volume requirement for Watershed 1. It was also determined that if it were possible for the 100-year flow to be conveyed in the storm drain, up to 20 cfs could be diverted to the water quality basin during the 100-year event. That scenario was analyzed to ensure that there is freeboard available to avoid flooding areas adjacent to the water quality basin. It is conceivable that the flow into the water quality basin could result in a minor flood control benefit, however, that was not the intent of the basin and no such benefit was accounted for in the master plan report.

The water quality basins were intended to provide water quality detention only and not flood control detention.

Both the original master plan and this current analysis have determined that development within Watershed 1 will result in a reduction of the 100-year flow in Strawberry and Unionhouse Creeks. As mentioned previously, the reduction is due to timing differences between pre-project and post-project conditions and the reduction of the watershed area from 0.43 square mile to 0.33 square mile.
NOTE:

1. DRAINAGE AREAS B, C, T, & S TO BE DEVELOPED AS MD UNDER ALTERNATIVE 1 AND AS TOD UNDER ALTERNATIVE 2.
PLAN VIEW

SECTION A-A

SECTION B-B

SCHEMATIC DIAGRAM OF WATER QUALITY BASINS
Appendix C: Storm Drain Analysis
| NODE   | NODE TYPE | BEND ANGLE | PIPE DIAMETER | PIPE LENGTH | FLOW | PIPE AREA | VELOCITY | HYDRAULIC RADIUS | CONVEYANCE | BEND LOSS COEFFICIENT | FRICTION LOSS | WATER QUALITY LOSS | OUTLET LOSS | FLAP GATE LOSS | TRANSITION LOSS | JUNCTION LOSS | BEND LOSS | TOTAL LOSS | LOWEST GROUND ELEVATION | HGL | FREEBOARD |
|--------|-----------|------------|---------------|-------------|------|-----------|----------|-----------------|------------|---------------------|---------------|---------------------|-------------|---------------|-------------|---------------|--------------|-------------|-----------|-----------|----------------------|-----|-----------|
| MH010 | MB        | 75         | 84            | 103         | 38.48| 2.68      | 1.75     | 5537            | 0.64       | 0.03                | 0.50          | 0.11                | 0.02         | 0.07         | 0.74        | 24.38         | 0.16        |
| MH020 | MB        | 10         | 84            | 270         | 103  | 38.48     | 2.68     | 1.75            | 5537       | 0.13                | 0.09          | 0.01                | 0.08         | 0.04         | 0.14        | 24.38         | 0.02        |
| MH030 | B         | 10         | 84            | 250         | 91   | 38.48     | 2.36     | 1.75            | 5537       | 0.13                | 0.07          | 0.05                | 0.15         | 0.18         | 26.51       | 24.38         | 2.14        |
| MH040 | MBJ       | 90         | 84            | 370         | 91   | 38.48     | 2.36     | 1.75            | 5537       | 0.70                | 0.10          | 0.05                | 0.16         | 0.18         | 26.61       | 24.38         | 1.99        |
| MH050 | MBJ       | 80         | 72            | 1150        | 69   | 28.27     | 2.44     | 1.50            | 3670       | 0.66                | 0.41          | 0.05                | 0.46         | 0.18         | 27.16       | 24.79         | -0.27       |
| MH060 | M         | 54         | 350           | 39          | 15.90| 2.45      | 1.13     | 1704            | 0.18       | 0.83                | 0.83          | 0.83                | 0.83         | 0.83         | 27.9        | 25.98         | 1.92        |
| MH070 | M         | 42         | 700           | 30          | 9.62 | 3.12      | 0.88     | 872             | 0.83       | 0.83                | 0.83          | 0.83                | 0.83         | 0.83         | 27.9        | 25.98         | 1.92        |
| MH080 | M         | 30         | 450           | 13          | 4.91 | 2.65      | 0.63     | 355             | 0.60       | 0.60                | 0.60          | 0.60                | 0.60         | 0.60         | 27.3        | 25.57         | 1.73        |
| MH090 | M         | 42         | 350           | 20          | 9.62 | 2.08      | 0.88     | 872             | 0.18       | 0.18                | 0.18          | 0.22                | 0.22         | 0.22         | 26.8        | 24.73         | 2.07        |
| MH100 | M         | 30         | 700           | 10          | 4.91 | 2.04      | 0.63     | 355             | 0.55       | 0.55                | 0.55          | 0.55                | 0.55         | 0.55         | 26.4        | 25.28         | 1.12        |
### Table C-2
**Alternative 1: College Square Without RT Station**

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<th>NODE</th>
<th>NODE TYPE</th>
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<th>PIPE DIAMETER</th>
<th>PIPE LENGTH</th>
<th>FLOW</th>
<th>VELOCITY</th>
<th>HYDRAULIC RADIUS</th>
<th>CONVEYANCE</th>
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<th>FRICTION LOSS</th>
<th>OUTLET LOSS</th>
<th>FLAP GATE LOSS</th>
<th>TRANSITION LOSS</th>
<th>JUNCTION LOSS</th>
<th>BEND LOSS</th>
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MH1050
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MH1040
MH1041 M 42 350 16 9.62 1.66 0.88 872 0.12 0.00 0.12 24.3 21.20 -3.11
MH1042 M 30 700 10 4.91 2.04 0.63 355 0.55 0.55 24.9 21.76 -3.11

---

1. 10-year water surface elevation in Strawberry Creek
2. 10-year water surface elevation in Unionhouse Creek
3. Distance from Bruceville Road to Unionhouse Creek downstream of Strawberry Creek confluence
# TABLE C-3
ALTERNATIVE 2: COLLEGE SQUARE WITH RT STATION

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</tbody>
</table>

1. 10-year water surface elevation in Strawberry Creek
2. 10-year water surface elevation in Unionhouse Creek
3. Distance from Bruceville Road to Unionhouse Creek downstream of Strawberry Creek confluence
Appendix F

Biology Information
This appendix contains the following items:

- June 20, 2000, wetland delineation prepared by ECORP Consulting

- November 8, 2000, letter from U.S. Army Corps of Engineers to ECORP Consulting regarding verification of wetland delineation

- *Wetland Delineation for College Square (20-Acre) (City of Sacramento, Sacramento County, California)*, dated December 13, 2002, prepared by ECORP Consulting

- December 4, 2001, letter from ECORP Consulting to U.S. Fish and Wildlife Service regarding modifications to the College Marketplace site plan

- December 12, 2001, letter from ECORP Consulting to U.S. Fish and Wildlife Service regarding impacts on seasonal marsh and proposed wetland mitigation

- February 7, 2002, letter from U.S. Fish and Wildlife Service to U.S. Army Corps of Engineers regarding formal consultation

- February 10, 2003, letter from ECORP Consulting to The Hoyt Company in response to biological resource-related questions from Brad Shirhall of the City of Sacramento

- February 14, 2003, letter from ECORP Consulting to U.S. Army Corps of Engineers regarding additional data collection points

- April 27, 2000, memorandum from Sandra Starr of ECORP Consulting regarding rare plant survey conducted for Cosumnes River Boulevard project site

- June 13, 2000, memorandum from Sandra Starr of ECORP Consulting regarding secondary rare plant survey conducted for Cosumnes River Boulevard project site

- Results of California Natural Diversity Database records search

- Fifth Year Monitoring Report, PAR Environmental Services
June 20, 2000, wetland delineation prepared by ECORP Consulting
20 June 2000

Mr. Mike Finan  
USAED, Sacramento Regulatory Branch  
Central California/Nevada Section  
1325 J Street, 14th Floor  
Sacramento, CA 95814-2922

Re: Cosumnes River Blvd./College Marketplace - Wetland Delineation Request for USACOE Verification

Dear Mr. Finan:

At the request of the Eureka Development Company, ECORP Consulting, Inc. has conducted a wetland delineation of the approximately 47-acre Cosumnes River Blvd./College Marketplace site. The subject property is located west of the State Highway 99 and south of Cosumnes River Blvd. in Sacramento County, California. The site is bound by Bruceville Road to the west, State Highway 99 and West Stockton Blvd. to the east, Cosumnes River Blvd. to the north, and rural residential parcels on Cotton Lane to the south. The site corresponds to a portion of Section 15, Township 7 North, Range 5 East (Mt. Diablo Baseline & Meridian) of the “Florin, California” 7.5 minute topographic quadrangle (U. S. Department of the Interior, Geological Survey) (Figure 1).

The wetland delineation was conducted on 08 and 09 March 2000 during which biologist walked meandering transects through the entire project site and mapped potentially jurisdictional waters of the U. S. The wetland delineation was conducted in accordance with the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987). Aerial photography (black and white, 1”=100” dated 10 February 1999) was utilized to assist with ground-truthing.

The site has been historically leveled, dry-farmed, and possibly grazed but is currently fallow. The survey area is comprised of annual grassland habitat that is dominated by non-native plant species such as ryegrass (Lolium multiflorum), filaree (Erodium botrys), medusahead grass (Taeniatherum caput-medusae), and wild oats (Avena fatua). Intermixed within the grassland matrix are naturally occurring seasonally inundated aquatic features and a constructed pond.

A total of 3.91 acres of potentially jurisdictional waters of the U. S. have been mapped for the Cosumnes River Blvd./Bruceville Road site (see attached wetland delineation map revision dated 08 June 2000). The total acreage is comprised of seasonal wetlands (0.52 acre), vernal pools (0.04 acre), and seasonal marsh (1.50 acres), and a constructed pond (1.85 acres).

Naturally occurring aquatic features include seasonally inundated areas such as vernal pools, seasonal wetlands, and a seasonal marsh. A large constructed pond is located within the...
northeastern portion of the site. The pond has an earthen berm appears to be inundated via direct rainfall and local run-off.

Vernal pools are isolated basins, which become inundated during the wet season and become dry during the spring. They are typically underlain with an impervious or semi-impervious claypan or hardpan layer. These features typically have a dominance of native annual plants such as slender popcorn flower (*Plagiobothrys stipitatus*), Carter's buttercup (*Ranunculus bonariensis*), winged water-starwort (*Callitriche marginata*), and Vasey's coyote thistle (*Eryngium vaseyi*).

Seasonal wetlands are isolated basins that are underlain with a semi-impervious soil layer and are inundated through the wet season but dry completely into the spring season. Plant species composition is typically comprised of non-native species such as ryegrass (*Lolium multiflorum*), curly dock (*Rumex crispus*), and Hyssop loosestrife (*Lythrum hyssopifolium*).

The seasonal marsh and constructed pond are located within the northern portion of the survey area. The seasonal marsh is a naturally occurring feature that receives direct rainfall as well as additional run-off from the adjacent Cosumnes River Blvd./Bruceville Road intersection. Plant species observed in the seasonal marsh included tall flatsedge (*Cyperus eragrostis*), Hyssop loosestrife, white water buttercup (*Ranunculus aquatilis*), and dotted smartweed (*Polygonum punctatum*). The constructed pond is comprised of primarily open water habitat but is vegetated at the shallower edges.

Please call me to schedule a field visit and if you have any questions regarding this project.

Sincerely,

Keith C. Kwan
Associate Biologist

Attachments
FIGURE 1. Project Site and Vicinity Map

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2000-028 Cosumnes River Blvd.
### Cosumnes River Blvd./College Marketplace
#### Wetland Delineation
##### Plants Observed at Data Points

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Indicator Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVE FAT</td>
<td><em>Avena fatua</em></td>
<td>Wild oat</td>
<td>N/L</td>
</tr>
<tr>
<td>BRO HOR</td>
<td><em>Bromus hordeaceus</em></td>
<td>Soft brome</td>
<td>FACU-</td>
</tr>
<tr>
<td>CON ARV</td>
<td><em>Convolvulus arvensis</em></td>
<td>Morning glory</td>
<td>N/L</td>
</tr>
<tr>
<td>CYP ERA</td>
<td><em>Cyperus eragrostis</em></td>
<td>Tall flatseed</td>
<td>FACW</td>
</tr>
<tr>
<td>ELE MAC</td>
<td><em>Eleocharis macrostachya</em></td>
<td>Creeping spikerush</td>
<td>OBL</td>
</tr>
<tr>
<td>ERO BOT</td>
<td><em>Erodium botrys</em></td>
<td>Filaree</td>
<td>FACU*</td>
</tr>
<tr>
<td>ERY VAS</td>
<td><em>Eryngium vasyi</em></td>
<td>Vasey's coyote-thistle</td>
<td>FACW</td>
</tr>
<tr>
<td>GLY spe.</td>
<td><em>Glyceria species</em></td>
<td>Manna grass</td>
<td>OBL</td>
</tr>
<tr>
<td>HEM FIT</td>
<td><em>Hemizonia fitchii</em></td>
<td>Fitch's spikeweed</td>
<td>FACU</td>
</tr>
<tr>
<td>HOR MAR</td>
<td><em>Hordeum marinum</em></td>
<td>Mediterranean barley</td>
<td>FAC+</td>
</tr>
<tr>
<td>LAC SER</td>
<td><em>Lactuca serriola</em></td>
<td>Prickly lettuce</td>
<td>FAC</td>
</tr>
<tr>
<td>LOL MUL</td>
<td><em>Lolium multiflorum</em></td>
<td>Ryegrass</td>
<td>FAC</td>
</tr>
<tr>
<td>LYT HYS</td>
<td><em>Lythrum hyssopifolium</em></td>
<td>Hyssop loosestrife</td>
<td>FACW</td>
</tr>
<tr>
<td>PHA spe.</td>
<td><em>Phalaris species</em></td>
<td>Canarygrass</td>
<td>- -</td>
</tr>
<tr>
<td>PLA STI</td>
<td><em>Plagiobothrys stipitatus</em></td>
<td>Slender popcorn-flower</td>
<td>OBL</td>
</tr>
<tr>
<td>POL PUN</td>
<td><em>Polygonum punctatum</em></td>
<td>Dotted smartweed</td>
<td>OBL</td>
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<tr>
<td>POL MON</td>
<td><em>Polygogon monspeliensis</em></td>
<td>Annual rabbit-foot grass</td>
<td>FACW+</td>
</tr>
<tr>
<td>PSI BRE</td>
<td><em>Psilocarthus brevissimus</em></td>
<td>Dwarf woolly-heads</td>
<td>OBL</td>
</tr>
<tr>
<td>RAN AQU</td>
<td><em>Ranunculus aquatilis</em></td>
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</tr>
<tr>
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<td><em>Ranunculus muricatus</em></td>
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</tr>
<tr>
<td>RUM CRI</td>
<td><em>Rumex crispus</em></td>
<td>Curly dock</td>
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</tr>
<tr>
<td>TAE CAP</td>
<td><em>Taeniatherum caput-medusae</em></td>
<td>Medusahed grass</td>
<td>N/L</td>
</tr>
<tr>
<td>XAN STR</td>
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<td>Rough cockle-bur</td>
<td>FAC+</td>
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**Indicator Status Codes**
- **OBL** = Obligate Wetland; occur almost always (estimated probability >99%) under natural conditions in wetlands.
- **FACW** = Facultative Wetland; usually occur in wetlands (estimated probability 67%-99%) under natural conditions in wetlands.
- **FAC** = Facultative; equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).
- **FACU** = Facultative Upland; usually occur in non-wetlands (estimated probability 67%-99%).
- **UPL** = Obligate Upland; occur almost always (estimated probability >99%) in non-wetlands in the region specified.
- **N/L** = Not Listed.
- **NI** = No indicator was recorded for those species for which insufficient information was available to determine a status.
- **-** = May or may not occur in wetlands depending upon species.

A positive (+) sign indicates a frequency toward the higher (more frequently found in wetlands) end of the facultative categories.
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ECORP Consulting, Inc.

ENVIRONMENTAL CONSULTANTS

ROUTINE WETLAND DELINEATION

Project/Site: Lossum River Blvd./Brounville

Applicant/Owner: Everke Development Co.

County: Sacramento

Quad(s): Florin, CA

Date: 3/9/00

Sample Point: 04

Field Investigator(s): K. Kwan

Plant Community: Annual Grassland

Section/Township/Range: T7N, R3E, S15

VEGETATION

<table>
<thead>
<tr>
<th>Species</th>
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<th>Dom.</th>
<th>% Cover</th>
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</thead>
<tbody>
<tr>
<td>1) Eleuca</td>
<td>OBL</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>2) Polypn</td>
<td>O61</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>3) Rum cap</td>
<td>FACW</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>4) Hammar</td>
<td>FACW</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>5) Ken st</td>
<td>FAC</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

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<td>6) Lythys</td>
<td>FACW</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>7) Gly ace</td>
<td>O61</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>8) Cyper</td>
<td>FACW</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>9) Rum agg</td>
<td>O61</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

Percentage of species that are OBL, FACW, and/or FAC: 75%.

Basis: Hydrophytic species dominance □ Upland species dominance □

Comments:

HYDROPHYTIC VEGETATION? Yes □ No □

SOILS

HYDRIC SOILS? Yes □ No □

Series/Phase: 214 Sandoquin -6 in complex, leveled, 0-1” slopes

Mottled? Yes □ No □ Gleyed? Yes □ No □

Hydric Components: Gleyed components in depression

Matrix color: 10YR 3/1

Mottle color: 7.5YR 4/6

Other Indicators:

Basis: Very low chroma □ Low chroma with mottles □ Gleyed □ Presumed aquic moisture regime □ High chroma □

Comments:

HYDROLOGY

WETLAND HYDROLOGY? Yes □ No □

Inundated? Yes □ No □ Depth of standing water: 12” +

Saturated? Yes □ No □ Depth to saturated soil: 

Other indicators:

Basis: Inundated/Saturated soil □ Topography □ Evidence of Seasonal Pooling □ Other:

Comments:

Do normal environmental conditions exist at this site? Yes □ No □ If no, explain:

Atypical Situation? Yes □ No □ Explain:

DECISION*

WETLAND/WATERS DETERMINATION? Yes □ No □

Rationale: all criteria have been met

General comments:

☑️ Vernal Pool ☐ Seasonal Wetland ☐ Drainage Swale ☐ Freshwater Marsh ☐ Stock Pond ☐ Intermittent Drainage

☑️ Other (specify) Seasonal marsh

Comments:
**ECORP Consulting, Inc.**

**ENVIROMENTAL CONSULTANTS**

**Routine Wetland Delineation**

Project/Site: **Cosumnes River Blvd. / Bruinsville**  
Date: **3/9/00**  
Sample Point: **05**

Applicant/Owner: **Eureka Development Co.**  
Field Investigator(s): **K. Kwan**

County: **Sacramento**  
State: **CA**  
Plant Community: **Annual Grassland**

Quad(s): **Florida, CA**  
Section/Township/Range: **T4N, R5E, Sec. 15**

### Vegetation

<table>
<thead>
<tr>
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<th>Ind. Status</th>
<th>Dom.</th>
<th>% Cover</th>
<th>Species</th>
<th>Ind. Status</th>
<th>Dom.</th>
<th>% Cover</th>
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<tbody>
<tr>
<td>Henbit</td>
<td>Fac</td>
<td>10</td>
<td></td>
<td>Acre f2</td>
<td>N/L</td>
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<tr>
<td>Lecser</td>
<td>Fac</td>
<td>5</td>
<td></td>
<td>Echino</td>
<td>N/L</td>
<td>10</td>
<td></td>
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<tr>
<td>Brocolr</td>
<td>Fac</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Tare cp</td>
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<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lol mol</td>
<td>Fac</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Percentage of species that are OBL, FACW, and/or FAC: **≤ 50 %**

Basis: Hydrophytic species dominance □ Upland species dominance ☑

Comments: 

### Soil

**Hydric Soils?** Yes □ No ☑

Series/Phase: **217 San Joaquin-Gully complex, Level 0 - 1 3/5 sly**

Mottled? Yes □ No ☑  
Gleyed? Yes □ No ☑  
Hydric Components: **Not Components in depressions**

Matrix color: **10YR  4/4**  
Mottle color:  
Other Indicators:  

Basis: Very low chroma □ Low chroma with mottles □ Gleyed □ Presumed aquatic moisture regime □ High chroma □

Comments: **highly disturbed/diked soil**

### Hydrology

**Wetland Hydrology?** Yes □ No ☑

Inundated? Yes □ No ☑  
Depth of standing water: ________  
Saturated? Yes □ No ☑  
Depth to saturated soil: ________

Other indicators:  

Basis: Inundated/Saturated soil □ Topography □ Evidence of Seasonal Pooling □ Other:  

Comments:  

Do normal environmental conditions exist at this site? Yes ☑ No □  
If no, explain:  

Atypical Situation? Yes □ No ☑  
Explain:  

### Decision *

**Wetland/Waters Determination?** Yes □ No ☑

Rationale: **All criteria have not been met**

General comments: **Typical upland area**

☑ Vernal Pool  ☑ Seasonal Wetland  ☑ Drainage Swale  ☑ Freshwater Marsh  ☑ Stock Pond  ☑ Intermittent Drainage  ☑ Other (specify)
ECORP Consulting, Inc.

ENVIRONMENTAL CONSULTANTS

Project/Site:  Comanche River Blvd.
Applicant/Owner:  Euroka Development Co.
County:  Sacramento
Quad(s):  Florin, CA, California
Date:  6/8/00
Sample Point:  06
Field Investigator(s):  Kwan
Plant Community:  Annual Grassland
Section/Township/Range:  T. 7N, R. 5E, sec(s). 15

--- VEGETATION ---

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<tbody>
<tr>
<td>1)  Lo / per nip</td>
<td>Fac</td>
<td>90</td>
<td></td>
<td>6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2)  Con / aversisij</td>
<td>M/L</td>
<td>10</td>
<td></td>
<td>7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3)  Lee / mar</td>
<td>Fac</td>
<td>tr</td>
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<td>8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4)  Rum / cri</td>
<td>FacW</td>
<td>tr</td>
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<td>9)</td>
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<td>5)  Pol / mon</td>
<td>FacW</td>
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<td>10)</td>
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Percentage of species that are OBL, FACW, and/or FAC: >50%
Basis: Hydrophytic species dominance ☑ Upland species dominance ☐
Comments: Convulvulus aversisij present due to drying and late germination

--- SOILS ---

Series/Phase:  217 San Joaquin-Galt complex, leveled, 0-198 slope
Mottled? Yes ☑ No ☐ Gleyed? Yes ☐ No ☐
Matrix color:  10YR 4/2 Mottle color:  7.5YR 4/6
Hydric Components:  Galt components in depressions
Other Indicators:  
Basis:  Very low chroma ☐ Low chroma with mottles ☑ Gleyed ☐ Presumed aquic moisture regime ☐ High chroma ☑
Comments:  

--- HYDROLOGY ---

Inundated? Yes ☑ No ☐ Depth of standing water: Saturated? Yes ☑ No ☐ Depth to saturated soil: 
Other indicators:  
Basis:  Inundated/Saturated soil ☑ Topography ☑ Evidence of Seasonal Pooling ☐ Other:  
Comments:  Some evidence of alkali wetting or dirt clods  
Do normal environmental conditions exist at this site? Yes ☑ No ☐ If no, explain:  
Atypical Situation? Yes ☐ No ☑ Explain:  

--- DECISION ---

* WETLAND HYDROLOGY?  Yes ☑ No ☐ *

WETLAND/WATERS DETERMINATION?  Yes ☑ No ☐

Rationale:  All criteria have been met
General comments:  Area has been recently disked but is readable agreement based upon topography and remnant vegetation

☑ Vernal Pool  ☑ Seasonal Wetland  ☐ Drainage Swale  ☑ Freshwater Marsh  ☐ Stock Pond  ☐ Intermittent Drainage
☐ Other (specify)
ECORP Consulting, Inc.

ENVIRONMENTAL CONSULTANTS

Project/Site: Los Coomes River Blvd.
Applicant/Owner: 
County: 
State: CA
Quad(s): , California

Date: 6/8/00 Sample Point: 07
Field Investigator(s): Kwan
Plant Community: 
Section/Township/Range: T. , R. , sec(s). 

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<td>Fac</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Hor mar 2</td>
<td>Fac</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Con env 3</td>
<td>N/L</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Pha spe 4</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Hum az 5</td>
<td>FacW</td>
<td>5</td>
<td></td>
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Percentage of species that are OBL, FACW, and/or FAC: >50%
Basis: Hydrophytic species dominance
Upland species dominance

Comments: recently drained; 0% based upon plant remains

SOILS

Series/Phase: 217 San Joaquin-Galt complex, Levelled 0-19.36m
On hydric soils list? Yes No
Mottled? Yes No Gleyed? Yes No
Matrix color: 10YR 2/1 Mottle color: 7.5YR 2/1
Basis: Very low chroma Low chroma with mottles
Gleyed Presumed aquatic moisture regime High chroma

Comments:

HYDROLOGY

Inundated? Yes No Depth of standing water: Saturated? Yes No Depth to saturated soil:

Other indicators:

Basis: Inundated/Saturated soil
Topography Evidence of Seasonal Pooling Other:

Comments: algal matting on dirt clods

Do normal environmental conditions exist at this site? Yes No If no, explain:

Atypical Situation? Yes No Explain:

DECISION

WETLAND HYDROLOGY? Yes No

Rationale: all criteria have been met

General comments: recently drained but topography is distinctive

Vernal Pool Seasonal Wetland Drainage Swale Freshwater Marsh Stock Pond Intermittent Drainage

Other (specify)
ECORP Consulting, Inc.  ROUTINE WETLAND DELINEATION

ENVIRONMENTAL CONSULTANTS

Project/Site: Losumers River Blvd.  Date: 6/8/03  Sample Point: 08
Applicant/Owner:  
County:  State: CA  Field Investigator(s): Kwan
Quad(s): , California  Plant Community: 
Section/Township/Range: T. , R. , sec(s). 

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<td>2) Hordeum vulgare</td>
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<td>3) Poa annua</td>
<td>FacW</td>
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<td>4) Rumex sp.</td>
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<th>Dom.</th>
<th>% Cover</th>
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<tr>
<td>10)</td>
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</table>

Percentage of species that are OBL, FACW, and/or FAC: 100 %
Basis: Hydrophytic species dominance  Upland species dominance

Comments: 

SOILS

Series/Phase: 217 San Joaquin -Gulf complex, leveled, 0-19, 51psi  On hydric soils list? Yes  No
Mottled? Yes  No  Gleyed? Yes  No  Hydric Components: Gulf components in depression
Matrix color: 10YR 3/2  Mottle color: 2.5YR 4/6  Other Indicators: 
Basis: Very low chroma  Low chroma with mottles  Gleyed  Presumed aquic moisture regime  High chroma

Comments: 

HYDROLOGY

Inundated? Yes  No  Depth of standing water: Saturated? Yes  No  Depth to saturated soil:
Other indicators:  Mn elevations present in undisturbed soil
Basis: Inundated/Saturated soil  Topography  Evidence of Seasonal Pooling  Other:
Comments: 

Do normal environmental conditions exist at this site? Yes  No  If no, explain:
Atypical Situation? Yes  No  Explain: 

* DECISION *

WETLAND/WATERS DETERMINATION? Yes  No

Rationale: all criteria have been met
General comments: recently disked area

- Vernal Pool  - Seasonal Wetland  - Drainage Swale  - Freshwater Marsh  - Stock Pond  - Intermittent Drainage

- Other (specify) 

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ENVIRONMENTAL CONSULTANTS

Project/Site: Losumtes River Blvd.
 Applicant/Owner: 
 County: State: CA
 Quad(s): , California

Date: 6/8/00  Sample Point: 09
 Field Investigator(s): Kwan
 Plant Community: 
 Section/Township/Range: T. R. sec(s). 

- VEGETATION

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HYDROPHYTIC VEGETATION? Yes [ ] No [x]

Percentage of species that are OBL, FACW, and/or FAC: %

Basis: Hydrophytic species dominance [ ] Upland species dominance [x]

Comments: Recently disked so 90% is based on remnants

- SOILS

Series/Phase: 217 San Joaquin -Galt complex, leveled 0-1/2
 On hydric soils list? Yes [x] No [ ]
 Mottled? Yes [ ] No [x] Gleyed? Yes [ ] No [x]
 Hydric Components: Galt complex, depress
 Matrix color: 10YR 3/2 Mottle color: Other Indicators:
 Basis: Very low chroma [ ] Low chroma with mottles [ ] Gleyed [x] Presumed alicmean moisture regime [ ] High chroma [ ]
 Comments: 

- HYDROLOGY

Inundated? Yes [ ] No [x] Depth of standing water: Saturated? Yes [ ] No [x] Depth to saturated soil:
 Other indicators:
 Basis: Inundated/Saturated soil [ ] Topography [x] Evidence of Seasonal Pooling [x]
 Other:
 Comments: 

Do normal environmental conditions exist at this site? Yes [x] No [ ] If no, explain:
 Atypical Situation? Yes [ ] No [x] Explain:

* DECISION *

WETLAND/HYDROLOGY? Yes [x] No [ ]

WETLAND/WATERS DETERMINATION? Yes [x] No [ ]

Rationale: All criteria have been met

General comments: Recently disked

[ ] Vernal Pool  [ ] Seasonal Wetland  [ ] Drainage Swale  [ ] Freshwater Marsh  [ ] Stock Pond  [ ] Intermittent Drainage
 [ ] Other (specify)

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November 8, 2000, letter from U.S. Army Corps of Engineers to ECORP Consulting regarding verification of wetland delineation
Kieth Kwan
ECORP Consulting, Inc.
2260 Douglas Blvd., Suite 160
Roseville, California  95661

Dear Mr. Kwan:

This letter concerns the delineation of waters of the United States, including wetlands, you have provided for the College Marketplace project. This property is located in Section 15, Township 7 North, Range 5 East, M.D.B. & M., Sacramento, Sacramento County, California.

We have reviewed and verified the March 20, 2000, revised September 13, 2000, Cosumnes River Blvd./College marketplace Wetland Delineation drawing which shows approximately 3.94 acres of waters of the United States, including wetlands, within the surveyed area. Our jurisdiction in this area is under Section 404 of the Clean Water Act. A Department of the Army permit is required prior to discharging dredged or fill materials into waters of the United States. Accordingly, a permit will be required prior to filling any of the waters present on the property. The type of permit required will depend on the type and amount of waters which would be lost or adversely modified by fill activities.

This verification is valid for five years from the date of this letter unless new information warrants revision of the determination before the expiration date. Please refer to identification number 200000334 in any correspondence concerning this project. If you have any questions, please write to Nancy Haley, Room 1480 at the letterhead address, or telephone (916) 557-7772.

Sincerely,

Michael Finan
Chief, Delta Office

Copies Furnished:

Doug Sutherland, College Marketplace, LLC, c/o Citadel Equities, 8211 Sierra College Blvd., #418, Roseville, California  95661
Wetland Delineation for College Square (20-Acre) (City of Sacramento, Sacramento County, California), dated December 13, 2002, prepared by ECORP Consulting
WETLAND DELINEATION

FOR

COLLEGE SQUARE (20-ACRE)

(CITY OF SACRAMENTO, SACRAMENTO COUNTY, CALIFORNIA)

December 13, 2002

Prepared for:
Granite Bay Holdings

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
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COLLEGE SQUARE (20-ACRE)

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Figure 2 – NRCS Soil Types
Figure 3 – Wetland Delineation Map

LIST OF APPENDICES
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Appendix B – Plant List
Appendix C – Wetland Delineation Map
1.0 INTRODUCTION

On behalf of Granite Bay Holdings, ECORP Consulting, Inc. has conducted a wetland delineation of the 20-acre College Marketplace site located in the City of Sacramento, Sacramento County, California. The subject property is located south of Cosumnes River Boulevard, west of State Highway 99, north of San Jacinto Road and east of Cosumnes River Community College (Figure 1 – Project Site and Vicinity Map). The site corresponds to a portion of Section 15, Township 7 North, and Range 5 East of the “Florin, California” 7.5-minute quadrangle (U. S. Department of the Interior, Geological Survey).

APPLICANT:

Attn: Mr. Larry John
Granite Bay Holdings
1693 Eureka Rd, Suite 100
Roseville, California 95661
Phone: (916) 780-5505
Fax: (916) 780-5506

AGENT:

Attn: Mr. Jim Stewart or Mr. Keith Kwan
ECORP Consulting, Inc.
2260 Douglas Blvd., Suite 160
Roseville, California 95661
Phone: (916) 782-9100
Fax: (916) 782-9134

2.0 SURVEY METHODOLOGY

The wetland delineation was conducted on October 3, 2002, during which time, biologist Keith Kwan walked and inspected the entire site. The entire site was walked to determine the extent of potential waters of the U. S. within the project site.

This wetland delineation was conducted in accordance with the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987). A number of three parameter data points were taken throughout the site, and their Global Positioning System (GPS) coordinates were logged and recorded with a Trimble GPS unit. A black and white aerial photograph (1"=00,’ flown on May 13, 1997) was utilized to assist with mapping and ground-truthing. A Munsell Soil Color Chart (Kollmorgen Instruments Corp. 1990) was used to identify hydric soils in the field and the Jepson Manual (Hickman 1994) was used for plant identification.
FIGURE 1. Project Site and Vicinity Map

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
©2000

Latitude: 38° 27' 15" N
Longitude: 121° 24' 50" W
STR: §15, T.7N., R.5E.
USGS Quad: Florin, CA

2000-028 College Square
The survey was conducted at the end of the dry season and was without significant precipitation for several months. All annual and most perennial plants were well past flowering and have set seed.

3.0 EXISTING SITE CONDITIONS

The site is comprised of leveled to relatively flat terrain, and is situated at an elevation of approximately 25 feet above mean sea level. According to the Soil Survey of Sacramento County, California (U. S. Department of Agriculture, Soil Conservation Service 1993), two soil units have been mapped for the site (Figure 2. – NRCS Soil Types). These are: (152) Galt clay, 0 to 1 percent slopes and (217) San Joaquin-Galt complex, leveled, 0 to 1 percent slopes.

The entire project area was disked prior to this field survey, so many plant species could not be identified. However, plant remnants with identifiable features were found in low numbers throughout the site.

Annual grassland is the dominant vegetation community on-site. The annual grassland community is comprised primarily of non-native, naturalized Mediterranean grasses. These include soft brome (Bromus hordeaceus), slender wild oats (Avena barbata), ryegrass (Lolium multiflorum), Mediterranean barley (Hordeum marinum), and medusahead grass (Taeniatherum caput-medusae). Other non-native herbaceous species in this community include filaree (Erodium botrys) and common vetch (Vicia sativa). Scattered vernal pools and seasonal wetlands are located in the northern and eastern portions of the survey area.

One home site is located on the western boundary of the site. The aboveground structures have been removed, but the foundation, utilities, and other evidence of dwellings remain. Irrigation pipes are located in the fields immediately to the east of the home site. A small area that is dominated by cattails (Typha spp.) is located in this field and appears to be the result of leaky irrigation, as there does not appear to be any natural hydrology in this leveled field.
Woody vegetation on-site is limited to scattered ornamental species around the home site and at various locations along fenceline boundaries.

3.1 Waters of the U.S.

Potentially jurisdictional waters of the U.S. mapped include wetlands (2.972 acres), which consist of vernal pools (2.374 acres) and seasonal wetlands (0.598 acres). Three parameter wetland delineation data sheets have been included as Appendix A, and a list of plant species observed at the data collection points is included as Appendix B. A figure depicting the wetland distribution is presented as Figure 3 and a map (1’’=100’) is presented in Appendix C.

3.1.1 Wetlands

Vernal pools are scattered through northern portion of the site. Vernal pools are topographic basins within the grassland community and typically are underlain with an impermeable or semi-permeable hardpan or duripan layer. Vernal pools are inundated up to one foot through the wet season and are dry by late spring through the following wet season.

A total of 2.374 acres of vernal pools have been mapped within the site. The plant species composition within vernal pools is predominantly native annual species that include Douglas mesamint (Pogogyne douglasii), dwarf woolly heads (Psilocarphus brevissimus), annual hairgrass (Deschampsia danthonioides), Fremont’s goldfields (Lasthenia fremontii), and slender popcorn flower (Plagiobothrys stipitatus). Italian ryegrass (Lolium multiflorum) and Mediterranean barley (Hordeum marinum) were also found in the vernal pools.

Seasonal wetland areas are ephemerally wet areas where runoff accumulates within low-lying areas and/or adjacent to watercourses. These may occur as basins or linear features. Linear features are typically referred to as drainage swales. The vegetative composition of the seasonal wetlands on-site is primarily comprised of non-native wetland generalist plants as well as native annual species. These include manna grass (Glyceria spp.), ryegrass, and Mediterranean barley.
FIGURE 3. Wetland Delineation

CLASSIFICATION        EXISTING ACREAGE

Vernal Pool           2.374
Seasonal Wetland     0.473

TOTAL                2.847

ECORP Consulting, Inc
ENVIRONMENTAL CONSULTANTS
4.0 INTERSTATE OR FOREIGN COMMERCE

The wetlands mapped on-site are within the Strawberry Creek watershed. Due to the topography of the site, overland flows of rainwater accumulate within the seasonal wetland and vernal pool features. During the wet season, water levels increase and ultimately drain into Strawberry Creek, which is immediately north of the site. Strawberry Creek is part of the greater Morrison Creek watershed and eventually flows into the Sacramento River, which is navigable water. Thus, these waters should be considered connected with and/or adjacent to a Waters of a U.S. and would therefore be subject to interstate and/or foreign commerce.

5.0 CONCLUSION

Potentially jurisdictional waters of the U. S. mapped include wetlands (2.972 acres), which consist of vernal pools (2.374 acres) and seasonal wetlands (0.598 acres). Any impact to these features would require permitting pursuant to Section 404 and 401 of the federal Clean Water Act.
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Appendix A. Wetland Delineation Data Sheets
Appendix B. Plant List
Appendix C. Wetland Delineation Map
APPENDIX A

Wetland Delineation Data Sheets
ECORP Consulting, Inc.
ENVIROMENTAL CONSULTANTS

Project/Site: College Square
Applicant/Owner: G8H
County: Sacramento
State: CA
Quad(s): Florin, CA
Field Investigator(s): K. Kwan
Plant Community: Annual Grassland
Section/Township/Range: T.7北, R.5 East, Sec.15

Do normal environmental conditions exist site? Yes ☐ No ☐ If no, explain:
Atypical Situation? Yes ☐ No ☐ Explain: disked field
Is this a potential Problem Area? Yes ☐ No ☐ Explain: seasonal pooling

• VEGETATION

<table>
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<th>Ind. Status</th>
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<th>Rel. % Cover</th>
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<td>Alopecurus</td>
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<tr>
<td>Poa pratensis</td>
<td>061</td>
<td>Lnd</td>
<td>14</td>
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Hydrophytic Vegetation? Yes ☐ No ☐

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 57/5 = 100%
Comments:

• HYDROLOGY

Recorded Data: Yes ☐ No ☐ If yes,

Depth of surface water: (in.) Depth to free water in pit: (in.) Depth to saturated soil: (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other

Comments: Topographic low area; apparent on aerial photo

• SOILS

Series/Phase: 217 San Joaquin - Golt complex, leveled, 0+1 % slope
Taxonomy [Subgroup]: Fine, mixed, thermic Allochelric Durbanaclts
Confirm Map Type: Yes ☐ No ☐

☒ Histosol ☒ Histic Epipedon ☒ Sufidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Paleochromic Colors ☒ Concretions
☒ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other

Inclusions [Series/Phase]: Golt components in depressions

On Hydric Soils List: Yes ☐ No ☐

Depth (in.) Horizon Matrix Color Motile Color Motile (Abund/Contrast/Size) Texture, Concretions, Structure
0-6 10YR 4/2 7.5YR 4/6

Comments:

• DECISION *

Wetland/Waters Determination? Yes ☒ No ☐

Rationale: all criteria have been met

General comments:

Wetland Type: transient pool

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ENVIRONMENTAL CONSULTANTS

ROUTINE WETLAND Delineation

Project/Site: College Square
Applicant/Owner: CGBH, State: CA
County: Sacramento
Quad(s): Florin, CA

Sample Point: 02
Field Investigator(s): K. Moran
Plant Community: Annual Grassland
Section/Township/Range: T7N, R5E, Sec. 15

Do normal environmental conditions exist site? Yes ☐ No ☐ If no, explain:

Atypical Situation? Yes ☐ No ☐ Explain: disked field

Is this a potential Problem Area? Yes ☐ No ☐ Explain:

- VEGETATION

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Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC]: 0/3 = 0 %
Comments:

- HYDROLOGY

Recorded Data: Yes ☐ No ☒ If yes, ______

Depth of surface water: _______ (in.) Depth to free water in pit: _______ (in.) Depth to saturated soil: _______ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other

Comments: typical upland area, topographically higher than surrounding wetland complex

- SOILS

Series/Phase: 24t San Joaquin-Galit complex, Levelled, 0-15% slopes
Taxonomy [Subgroup]: ____________

Drainage Class: ☐ well drained ☐ poorly drained
Confirm Map Type: Yes ☐ No ☐

☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other

Inclusions [Series/Phase]: ____________

On Hydric Soils List: Yes ☐ No ☐

Depth (in.): 0-6

Matrix Color: 10YR 2/12

Mottle Color: ____________

Mottle (Abundance/Contrast/Size): ____________

Texture, Concretions, Structure: ____________

Comments: High chroma

- DECISION *

Wetland/Waters Determination? Yes ☐ No ☐

Rationale: All criteria have not been met

General comments:

Wetland Type:

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ENVIRONMENTAL CONSULTANTS

Project/Site: College Square
Applicant/Owner: GBH
County: Sacramento
Quad(s): Florin, CA

Date: 10/3/02
Sample Point: 03
Field Investigator(s): K. Kwan
State: CA
Plant Community: Annual Grassland
Section/Township/Range: T7N, R5E, S15

Do normal environmental conditions exist site? Yes ☑ No ☐ If no, explain:
Atypical Situation? Yes ☑ No ☐ Explain: Drained Field
Is this a potential Problem Area? Yes ☑ No ☐ Explain: Seasonal pooling

VEGETATION

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Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: \( \frac{50}{50} = 100 \% \)
Comments:

HYDROLOGY

Recorded Data: Yes ☑ No ☐ If yes,

Depth of surface water: ________ (in.) Depth to free water in pit: ________ (in.) Depth to saturated soil: ________ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
☒ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other algae coating

Comments: Topographic low area

WETLAND HYDROLOGY? Yes ☑ No ☐

SOILS

Series/Phase: 21T San Joaquin - Soil complex (levelled 0 to 15) toes
Taxonomy [Subgroup]: Fine mixed histic Alfic Haplustolls
Drainage Class: med. well drained
Confirm Map Type: Yes ☑ No ☐
☒ Histosol ☒ Histic Epipedon ☒ Sufidic Odor ☒ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed/Low Chroms Colors ☒ Concretions ☒ High Organic Content in Surface Layer in Sandy Soils ☒ Organic Streaking in Sandy Soils ☒ Listed on Hydric Soils List ☐ Other

Inclusions [Series/Phase]: Soil components in depressions

On Hydric Soils List: Yes ☑ No ☐

Depth (in.): 0 - 6
Horizon: 0 - 6
Matrix Color: 10YR 2/1
Mottle Color: 7.5YR 4/1
Mottle (Abundance/Contrast/Size):
Texture, Concretions, Structure:

Comments:

DECISION

Rationale: all criteria have been met
General comments:

Wetland Type: Seasonal wetland

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ECORP Consulting, Inc.  
ROUTINE WETLAND DELINEATION
ENVIRONMENTAL CONSULTANTS

Project/Site: College Square  
Applicant/Owner: GBI  
County: Sacramento  
Quad(s): Florin, CA

Date: 10/3/02  
Field Investigator(s): K. Kwan  
State: CA  
Plant Community: Annual Grassland  
Section/Township/Range: T.7 North, R.5 East, Sec.15

Do normal environmental conditions exist site? Yes ☐ No ☐ If no, explain:  
Atypical Situation? Yes ☐ No ☐ Explain: disturbed field

Is this a potential Problem Area? Yes ☐ No ☐ Explain:

* VEGETATION *

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<th>Stratum</th>
<th>Rel. % Cover</th>
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</tr>
</tbody>
</table>

5) | | | |

6) | | | |

7) | | | |

8) | | | |

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: \( \frac{12}{24} = 50\% \)

Comments:

* HYDROLOGY *

WETLAND HYDROLOGY? Yes ☐ No ☐

Recorded Data: Yes ☐ No ☐ If yes, ____________

Depth of surface water: _______ (in.)  
Depth to free water in pit: _______ (in.)  
Depth to saturated soil: _______ (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other

Comments: topographically higher area than surrounding wetland complex

* SOILS *

HYDRIC SOILS? Yes ☐ No ☐

Series/Phase: 21t San Joaquin-Galt complex leveled 0.5 to 1.9 ft above

Taxonomy [Subgroup]: Fine, mixed, thermic Chromic Torriorthents

Drainage Class: mod. well drained

Confirm Map Type: Yes ☐ No ☐

☒ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

☒ High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other

Inclusions [Series/Phase]: Salt components in depressions

On Hydric Soils List: Yes ☐ No ☐

Depth (in.)  
0-6

Horizon Matrix Color Mottle Color Mottle (Abund/Contrast/Size) Texture, Concretions, Structure

0-6

1072 4/5

Comments: high chroma

* DECISION *

WETLAND / WATERS DETERMINATION? Yes ☐ No ☐

Rationale: all criteria have not been met

General comments:

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APPENDIX B

Plant List
College Square – Wetland Delineation
Plants Observed at Data Points

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Indicator Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALO SAC</td>
<td>Alopecurus saccatus</td>
<td>Pacific foxtail</td>
<td>OBL</td>
</tr>
<tr>
<td>AVE FAT</td>
<td>Avena fatua</td>
<td>Wild oat</td>
<td>N/L</td>
</tr>
<tr>
<td>BRO HOR</td>
<td>Bromus hordeaceus</td>
<td>Soft brome</td>
<td>FACU-</td>
</tr>
<tr>
<td>CEN SOL</td>
<td>Centaurea solstitialis</td>
<td>Yellow star-thistle</td>
<td>N/L</td>
</tr>
<tr>
<td>DES DAN</td>
<td>Deschampsia danthonioides</td>
<td>Annual hairgrass</td>
<td>FACW</td>
</tr>
<tr>
<td>ELE MAC</td>
<td>Eleocharis macrostachya</td>
<td>Creeping spikerush</td>
<td>OBL</td>
</tr>
<tr>
<td>ERO BOT</td>
<td>Erodium botrys</td>
<td>Filarree</td>
<td>N/L</td>
</tr>
<tr>
<td>GLY spe.</td>
<td>Glyceria species</td>
<td>Manna grass</td>
<td>OBL</td>
</tr>
<tr>
<td>HOL VIR</td>
<td>Holocarpha virgata</td>
<td>Sticky tarweed</td>
<td>N/L</td>
</tr>
<tr>
<td>LOL MUL</td>
<td>Lolium multiflorum</td>
<td>Ryegrass</td>
<td>FAC*</td>
</tr>
<tr>
<td>LYT HYS</td>
<td>Lythrum hyssopifolium</td>
<td>Hyssop loosestrife</td>
<td>FACW</td>
</tr>
<tr>
<td>PLA STI</td>
<td>Plagiobothrys stipitus</td>
<td>Slender popcorn-flower</td>
<td>OBL</td>
</tr>
<tr>
<td>POG ZIZ</td>
<td>Pogogyne zizyphoroides</td>
<td>Sacramento mesamint</td>
<td>OBL</td>
</tr>
<tr>
<td>PSI BRE</td>
<td>Psilocarphus brevissimus</td>
<td>Dwarf woolly-heads</td>
<td>OBL</td>
</tr>
<tr>
<td>RUM CRI</td>
<td>Rumex crispus</td>
<td>Curly dock</td>
<td>FACW-</td>
</tr>
</tbody>
</table>

**Indicator Status Codes**

- **OBL** = Obligate Wetland; occur almost always (estimated probability >99%) under natural conditions in wetlands.
- **FACW** = Facultative Wetland; usually occur in wetlands (estimated probability 67%-99%) under natural conditions in wetlands.
- **FAC** = Facultative; equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).
- **FACU** = Facultative Upland; usually occur in non-wetlands (estimated probability 67%-99%).
- **OBL** = Obligate Upland; occur almost always (estimated probability >99%) in non-wetlands in the region specified.
- **N/L** = Not Listed.
- **NI** = No indicator was recorded for those species for which insufficient information was available to determine a status.
- **--** = May or may not occur in wetlands depending upon species.

A positive (+) sign indicates a frequency toward the higher (more frequently found in wetlands) end of the facultative categories.
A negative (-) sign indicates a frequency toward the lower (less frequently found in wetlands) end of the facultative categories.
An asterisk (*) indicates a tentative assignment based upon limited information or conflicting review.

2000-028.1 WD Plant List
December 4, 2001, letter from ECORP Consulting to U.S. Fish and Wildlife Service regarding modifications to the College Marketplace site plan
December 4, 2001

Mr. Ken Fuller
U.S. Fish and Wildlife Service
2800 Cottage Way, W-2605
Sacramento, CA 95825

RE: College Market Place – (1-1-01-I-2541) (Corps # 200000334)

Mr. Fuller:

Thank you for meeting with Bradley Cutler (Citadel Equities Group) and I, on 14, November 2001 to discuss revisions to the College Market Place project. ECORP, Doucet and Associates (project engineer) and the applicant have incorporated suggested modifications into the site plan with particular attention given to pre and post-construction hydrology, water quality issues and more buffer details. Enclosed in this submittal are the following exhibits:

- Site Plan with proposed development
- Baseline wetlands map with existing topography
- Detail of adjacent city off-site wetland preserve
- Drainage Plan with post-construction topography
- Water Quality information (pre-treatment) on Drainage Plan
- Cross Section (two) of Development/Preserve Interface

The site has been designed with the College market Place project sheet flowing and conveying (via storm drains) stormwater away from the preserve. In addition, a network of grassy swales has been added to the plan to capture pollutants (hydrocarbons and nutrients) prior to discharge into the storm sewer system.

Prior to site grading a Notice of Intent will be filed with the California Regional Water Quality Control Board and a Stormwater Pollution Prevention Plan (SWPPP) prepared. A qualified erosion control monitor will implement the SWPPP and ensure Best Management Practices are maintained.
The applicant is aware of the concerns U.S. Fish and Wildlife Service (USFWS) have of the long-term viability of the preserve. To ensure that the proposed development does not adversely impact the preserve the following measures have been incorporated into the plan:

- Re-grade toe ditch along Cosumnes River College Boulevard to convey tainted sheet flow (hydrocarbons) away from preserve.
- Proposed Stockton Boulevard extension (east-west road, south of preserve) will have a curb along its edge with a series of catch basins to capture street surface sheet flow into a storm sewer system to convey flows away from preserve. The elevation of the proposed road is higher near the preserve and decreases in elevation as it approaches Bruceville Road. The storm sewer system will convey water (via gravity) from east to west away from the preserve.
- Proposed parking lot along western edge of preserve will be graded to sheet flow away from preserve (to the west).
- Parking lot will have a curb along top-of-slope adjacent to preserve boundary. The curb will intercept any potential sheet flow from entering the preserve.
- A network of grassy swales has been incorporated into the plan. Grassy swales are an effective, passive pre-treatment application that captures nutrient-rich sheet flow and metals (root uptake) prior to stormwater entering a storm sewer system.
- Other water quality measures may be included in the plan – i.e. stormwater interceptor vault, and catch basin fossil filters.
- As detailed in the two cross-sections (A-A' and B-B') measures to enhance the preserve perimeter and associated buffers have been added to the plan.
  - A-A' cross-section details the preserve edge along the eastern edge of the development. A chain-link fence will be installed to minimize pedestrian and vehicle access and to reduce windblown litter from entering the preserve. When the City of Sacramento constructed the wetland that is within the preserve (a compensation measure unrelated to this project) the wetland feature encroaches to within 25' of the preserve boundary. This application proposes to add 25 feet to the buffer and erect a vinyl coated 6' chain link fence along the outer edge of the increased buffer. The slope from the development down to the buffer will be planted with native vegetation (agency-approved) and restrictions will be placed upon the uses of herbicides and pesticides on the preserve margins.
  - B-B' cross-section details the proposed extension of Stockton Boulevard. Although the road will abut the southern edge of preserve, the four-lane road (city mandated) will actually result in a net gain of undisturbed area within the preserve. An existing cul-de-sac, which extends into the preserve will be removed and restored to pre-existing upland grasses. The proposed new road has been moved south to avoid encroachment into the preserve. The preserve edge will be fenced and the buffer planted with native vegetation to provide protection from street-related glare and noise. As previously mentioned all road-associated sheet flow will be conveyed away from the preserve. On the accompanying preserve detail graphics, a range of buffer widths is displayed.
The applicant is aware of the adjacent wetland preserve, which is the property of the City of Sacramento. After discussions with the USFWS personnel, the applicant is also aware of the importance of long-term protection of this preserve. The applicant does not have the ability to place a conservation easement/deed restriction on property they do not own. However, they will make every effort to discuss with City staff, the appropriateness of combining the City preserve with the buffer along the eastern edge of the project. In addition, the applicant will discuss with City staff the placement of a perimeter fence around the preserve. Since the applicant does not have access to property they do not own, the applicant is not in a position to guarantee that the City will enter into a cooperative venture.

In closing, the applicant is aware of the sensitivity of the protected wetland adjacent to the proposed project. A series of modifications have been incorporated into the site plan, which address long-term protection of the preserve and minimization of adverse impacts to the protected wetland. With the long-term commitment the applicant has regarding the protection of the preserve they are requesting that you consider a 6:1 compensatory ratio for indirect impacts. Below is a revised wetland impact/mitigation table that reflects modifications to the site plan.

PROPOSED WETLAND MITIGATION

<table>
<thead>
<tr>
<th>Wetland Type</th>
<th>Existing On-site</th>
<th>Existing Off-site Preserve</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Creation Credits</th>
<th>Preservation Credits</th>
<th>Credit Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructed Wetland (Off-site)</td>
<td>--</td>
<td>1.85</td>
<td>--</td>
<td>1.85</td>
<td>5.55 (3:1)</td>
<td>5.55 (3:1)</td>
<td>(6:1)</td>
</tr>
<tr>
<td>Seasonal Marsh (Off-site)</td>
<td></td>
<td>0.07</td>
<td></td>
<td>0.07</td>
<td>0.21 (3:1)</td>
<td>0.21 (3:1)</td>
<td>(6:1)</td>
</tr>
<tr>
<td>Seasonal Marsh</td>
<td>1.28</td>
<td>--</td>
<td>1.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vernal Pool</td>
<td>0.16</td>
<td>--</td>
<td>0.16</td>
<td></td>
<td>0.16 (1:1)</td>
<td>0.32 (2:1)</td>
<td>(3:1)</td>
</tr>
<tr>
<td>Seasonal Wetland</td>
<td>0.59</td>
<td>--</td>
<td>0.59</td>
<td></td>
<td>0.59 (1:1)</td>
<td>1.18 (2:1)</td>
<td>(3:1)</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>2.03</strong></td>
<td><strong>1.92</strong></td>
<td><strong>1.96</strong></td>
<td><strong>1.92</strong></td>
<td><strong>6.51</strong></td>
<td><strong>7.26</strong></td>
<td></td>
</tr>
</tbody>
</table>
There have been many factors outside of the applicant’s control which have influenced the present situation, however the applicant will implement measures to ensure the proposed College Market Place does not adversely impact the preserve.

If you have questions, please contact me at (916) 782-9100.

Sincerely,

Jim Stewart
President

Attachments

CC: ¼½ Ms. Nancy Haley / U.S. Army Corps of Engineers
     ¼½ Mr. Bradley Cutler / Citadel Equities Group LLC
     ¼½ Mr. Doug Sutherland / Citadel Equities Group LLC
     ¼½ Mr. Rick Chavez / Doucet and Associates, Inc.
     ¼½ Mr. Greg Thatch / Law Offices of Gregory D. Thatch
December 12, 2001, letter from ECORP Consulting to U.S. Fish and Wildlife Service regarding impacts on seasonal marsh and proposed wetland mitigation
December 12, 2001

Mr. Ken Fuller
U.S. Fish and Wildlife Service
2800 Cottage Way, W-2605
Sacramento, California 95825

RE:  College Market Place – (1-1-01-I-2541) (Corps # 200000334)

Dear Mr. Fuller:

Per our telephone conservation, we have reviewed the 'Proposed Wetland Mitigation' table that was included in our December 4, 2001 submittal to your office. We have revised the table to reflect direct and indirect impacts to the seasonal marsh. Please review the modified table and if you have questions regarding the table below or the December 4, 2001 submittal, please contact me at (916) 782-9100.

PROPOSED WETLAND MITIGATION

<table>
<thead>
<tr>
<th>Wetland Type</th>
<th>Existing On-site</th>
<th>Existing Off-site Preserve</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Creation Credits</th>
<th>Preservation Credits</th>
<th>Credit Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructed Wetland</td>
<td>--</td>
<td>1.85</td>
<td>--</td>
<td>1.85</td>
<td>5.55 (3:1)</td>
<td>5.55 (3:1)</td>
<td>(6:1)</td>
</tr>
<tr>
<td>(Off-site)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seasonal Marsh</td>
<td>--</td>
<td>0.29</td>
<td>--</td>
<td>0.29</td>
<td>0.87 (3:1)</td>
<td>0.87 (3:1)</td>
<td>(6:1)</td>
</tr>
<tr>
<td>(Off-site)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seasonal Marsh</td>
<td>1.21</td>
<td>--</td>
<td>1.21</td>
<td>--</td>
<td>1.21 (1:1)</td>
<td>2.42 (2:1)</td>
<td>(3:1)</td>
</tr>
<tr>
<td>Vernal Pool</td>
<td>0.16</td>
<td>--</td>
<td>0.16</td>
<td>--</td>
<td>0.16 (1:1)</td>
<td>0.32 (2:1)</td>
<td>(3:1)</td>
</tr>
<tr>
<td>Seasonal Wetland</td>
<td>0.59</td>
<td>--</td>
<td>0.59</td>
<td>--</td>
<td>0.59 (1:1)</td>
<td>1.18 (2:1)</td>
<td>(3:1)</td>
</tr>
</tbody>
</table>

Total: 1.96 2.14 1.96 2.14 8.38 10.34

Sincerely,

Jim Stewart
President

CC: Ms. Nancy Haley / U.S. Army Corps of Engineers
    Mr. Bradley Cutler / Citadel Equities Group LLC
    Mr. Doug Sutherland / Citadel Equities Group LLC
    Mr. Rick Chavez / Doucet and Associates, Inc.
    Mr. Greg Thatch / Law Offices of Gregory D. Thatch
February 7, 2002, letter from U.S. Fish and Wildlife Service to U.S. Army Corps of Engineers regarding formal consultation
Mr. Michael Finan  
Chief, Delta Office  
Sacramento Regulatory Office  
U.S. Army Corp of Engineers  
1325 J Street  
Sacramento, California 95814-2922

February 7, 2002

Subject: Formal Consultation on College Market Place Project (Corp # 200000334),  
Sacramento County, California

Dear Mr. Finan:

This letter is in response to your letter dated November 24, 2001, requesting formal consultation with the U. S. Fish and Wildlife Service (Service) on the College Market Place Project, Sacramento County, California. We received your letter on November 28, 2001. Based upon available information, the proposed project may adversely affect the endangered vernal pool tadpole shrimp (Lepidurus packardi) and the threatened vernal pool fairy shrimp (Branchinecta lynchii). The original project description has changed since your November 24, 2001, letter which stated that the proposed project would fill 3.89 acres of wetlands including the 1.85-acre constructed vernal pool and all of the 1.50-acre former control vernal pool utilized in the 1993 Consumes River Boulevard-Calvine Road Interchange project. College Market Place LLC, the project applicant, now anticipates 1.96 acres of direct and 2.14 acres of indirect impacts to vernal pools on the proposed project site as a result of a series of meetings with other governmental agencies. This document represents the Service's biological opinion on the effects of the action on the vernal pool fairy shrimp and vernal pool tadpole shrimp, in accordance with section 7 of the Endangered species Act of 1973, as amended (Act).

This biological opinion is based upon information provided in: 1) the October 1999 Fifth Year Monitoring Report for Vernal Pool and Strawberry Creek Mitigation prepared by Par Environmental Services, Inc.; 2) a permit application to fill wetlands, dated October 30, 2000; 3) a site visit by Ken Fuller of the Service with Hal Freeman, ECORP Consulting, Inc. (ECORP) to the proposed project on December 11, 2000; 4) the ECORP's June 26, 2001, letter containing a revised project description and a response to agencies comments; 5) the Revised Wetland Delineation, dated December 15, 2000, for the proposed project; 6) a January 10, 2001, letter from Mike Finan of the U.S. Army Corp of Engineers (Corps) detailing concerns and objections of the proposed project from the Environmental Protection Agency (EPA) and Corps; 7) a comment letter, dated July 13, 2001, from Jan Knight of the Service to Mike Finan of the Corps...
detailing our concerns about indirect and direct impacts to vernal pools and conservation measures needed to offset impacts to habitat occupied by vernal pool crustaceans on the proposed project site; 8) revisions to the proposed project on December 4, 2001; 9) the revised wetland mitigation plan, dated December 12, 2001; and 10) various project meetings and phone calls with representatives of the proposed project applicant and consultants. A complete administrative record of this consultation is on file in the Sacramento Fish and Wildlife Office.

Consultation History

November 24, 2000. The Corps sends a letter requesting formal consultation on the proposed project.

December 1, 2000. The Corps issues Public Notice 200000334 for the proposed project.

December 12, 2000. Ken Fuller of the Service conducts a site visit to the proposed project site with Hal Freeman of ECORP.

December 27, 2000. The Service’s Wetlands Branch sends a comment letter on the proposed project.

December 28, 2000. The EPA sends a letter to the Corps recommending denial of the permit on grounds of a failed alternatives analysis, insufficient information on compensatory mitigation and that part of the proposed project is to be located on an existing wetland mitigation site occupied by the vernal pool tadpole shrimp.

January 10, 2001. The Corps sends the project applicant a letter detailing objections and concerns that the Corps, EPA, and the Service have about the proposed project. Corps states that they are delaying any actions on the permit until concerns have been resolved.

March 19, 2001. Nancy Haley of the Corps hosts a meeting with Hal Freeman, of ECORP and Betty Warne and Ken Fuller of the Service to discuss concerns about proposed project and its direct and indirect effects to vernal pools.

June 26, 2001. ECORP sends out a revised project description and compensation and information on off-site alternatives analysis.

July 13, 2001. The Service sends the Corps a letter detailing our objections to the proposed project and compensation and recommends that the applicant revise the proposed project or the Corps deny the permit for fill of wetlands.

August 23, 2001. Jan Knight and Ken Fuller return a phone call to Greg Thatch, an attorney now representing the project applicant. The Service’s concerns are verbally repeated as they were detailed in writing in the Service’s July 13, 2001, letter (Service file 1-1-01-I-2541).

November 14, 2001. Jim Stewart of ECORP meets with Bradley Cutler of the Citadel Equities Group, representing College Market Place, and Ken Fuller of the Service to discuss recent project description changes that have occurred since August 2001.
December 12, 2001. Jim Stewart sends a letter to the Service and the Corps revising the wetland conservation for the proposed project.

BIOLOGICAL OPINION

Description of the Proposed Action

The proposed action is to construct a mixed small business complex with associated parking on approximately a 47-acre site of open lands west of Consumes River Community College and east of California State Highway 99 in South Sacramento County. The proposed project site is located within section 15, Township 7 North, Range 5 East, M. D. B. M. The property is bounded by a freeway to the east, a four lane road to the west, a six lane road to the north, and open space on the south side. College Market Place LLC would commence site grading and construction in 2002. Under the permit application with the Corps, College Market Place proposed to fill all 3.89 acres wetlands on the proposed project site. However, the current proposed project intends to directly fill 1.96 acres of wetlands (1.21 acres of seasonal marsh, 0.59 acre of seasonal wetland and 0.16 acre of vernal pool) and indirectly impact 2.14 acres of wetlands (1.85 acres of vernal pools and 0.29 acre of seasonal marsh). College Market Place LLC assumes presence of listed invertebrates in all wetlands on the proposed project site and proposes to compensate for impacts to listed invertebrate habitat by purchasing 10.34 preservation credits and 8.38 creation credits at a Service-approved conservation bank prior to start of site grading.

The College Market Place project is designed to direct sheet flowing waters and stormwaters away from the preserved vernal pools on the adjacent property to the east of the project site and improve water quality on site. The College Market Place project will have a network of grassy swales constructed to capture nutrient and hydrocarbon pollutants prior to discharge into the storm sewer system. A Stormwater Pollution Prevention Plan (SWPPP) will be prepared and implemented by a qualified erosion control monitor. Incorporated into the SWPPP are the following measures: 1) re-grade the toe-ditch along Cosumnes River College Boulevard to convey any hydrocarbon tainted sheet flow away from the adjacent vernal pool preserve; 2) the proposed Stockton Boulevard extension, running east-west through the proposed project site, will have a curb along its edge with a series of catch basins to capture sheet flow into a storm water sewer system to convey flows via gravity westward away from the vernal pool preserve; 3) the proposed parking lots along the western edge of the vernal pool preserve will be graded to direct sheet flow away from the vernal pool preserve; 4) the same proposed parking lot will have a curb along its top-slope adjacent to the preserve boundary along the western edge of the preserve to intercept any sheet flow; 5) stormwater interceptor vaults and catch basin fossil filters will be installed into the drainage system to improve water quality; 6) an additional 25 feet of width will be added to the buffer of the adjacent vernal pool preserve along its western edge; 7) a 6-foot tall vinyl-coated chain link fence will be constructed along the outer edge of the increased buffer area to deter pedestrian and vehicle traffic from entering the vernal pool preserve; 8) the slope from the proposed project site down into the vernal pool preserve will be planted with native vegetation and restrictions will be placed upon the use of herbicides and pesticides along the preserve margin; 9) the existing cul-de-sac which presently extends into the preserve will be removed; and 10) the Sacramento City-mandated new road into the proposed project will be moved south to avoid encroachment into the vernal pool preserve.
Mr. Mike Finan

Status of the Species

Vernal Pool Crustaceans

A final rule was published in the Federal Register on September 19, 1994, (U. S. Fish and Wildlife Service 1994) to list vernal pool fairy shrimp as threatened and vernal pool tadpole shrimp as endangered under the Act. Additional information on the life history and ecology of these animals may be found in the final rule, Eng et al. (1990), Simovich et al. (1992), Helm (1998), and Witham et al. (1998). Vernal pool fairy shrimp are restricted to vernal pools, swales, and other seasonal wetlands in California and southern Oregon. Vernal pool tadpole shrimp are restricted to similar habitats in California's Central Valley and San Francisco Bay area.

Vernal Pool Fairy Shrimp. Vernal pool fairy shrimp have delicate elongate bodies; large, stalked, compound eyes; no hard shell (i.e., no carapace); and 11 pairs of swimming legs. Typically less than 2.5 centimeters (cm) (1 inch) long, they swim or glide gracefully upside-down by means of complex, wavelike beating movements while feeding on algae, bacteria, protozoa, rotifers, and detritus. Female vernal pool fairy shrimp carry eggs in a pear-shaped, ventral brood sac until the eggs are either dropped or sink to the pool bottom with the female when she dies. The "resting" or summer eggs are known as cysts. The cysts which remain after pools dry are able to withstand heat, cold, and prolonged desiccation. When pools refill in the same or subsequent seasons, some, but not all, of the cysts may hatch, resulting in a cyst bank in the soil that may include cysts from several breeding seasons (Donald 1983). Vernal pool fairy shrimp develop rapidly and may become sexually mature within two weeks after hatching (Gallagher 1996, Helm 1998). Such quick maturation permits fairy shrimp populations to persist in short-lived, shallow bodies of water (Simovich et al. 1992).

Vernal pool fairy shrimp inhabit alkaline pools, ephemeral drainages, rock outcrop pools, ditches, stream oxbows, stock ponds, vernal pools, vernal swales, and other seasonal wetlands (Helm 1998). Occupied habitats range in size from rock outcrop pools as small as one square meter to large vernal pools up to 4.5 hectares (11 acres); the potential ponding depth of occupied habitat ranges from 3 cm (1.2 inches) to 1.2 meters (48 inches). The vernal pool fairy shrimp has been collected from early December to early May. Known populations of vernal pool fairy shrimp in California extend from Stillwater Plain in Shasta County through most of the length of the Central Valley to Pixley in Tulare County and along the central coast range from northern Solano County to Pinnacles National Monument in San Benito County. Several additional, disjunct populations exist: one near Soda Lake in San Luis Obispo County, one in the mountain grasslands of northern Santa Barbara County, one on the Santa Rosa Plateau in Riverside County, and one near Rancho California in Riverside County. Additional populations occur in southern Oregon.

Vernal pool tadpole shrimp. Vernal pool tadpole shrimp have large, shield-like carapaces that cover most of their body; dorsal, compound eyes; and a pair of long cercopods, one on each side of a flat caudal plate, at the end of their last abdominal segment. With a carapace typically less than 2.5 cm (1 inch) long, vernal pool tadpole shrimp are primarily bottom-dwelling animals that move with legs down while feeding on detritus and living organisms, including fairy shrimp and other invertebrates (Pennak 1989). Females deposit eggs on vegetation or other objects on the pool bottom. Although some eggs may hatch quickly, others remain dormant as cysts to hatch during later rainy seasons (Ahl 1991). When winter rains refill inhabited wetlands, tadpole
shrimp reestablish from dormant cysts and may become sexually mature within three to four weeks after hatching (Ahl 1991, Helm 1998). Reproductively mature adults may be present in pools until the habitats dry up in the spring (Ahl 1991, Simovich et al. 1992, Gallagher 1996). Vernal pool tadpole shrimp inhabit alkaline pools, clay flats, ditches, freshwater marshes, stream oxbows, vernal lakes, vernal pools, vernal swales, and other seasonal wetlands (Helm 1998). Occupied habitats range in size from vernal pools as small as two square meters to large vernal lakes up to 36 hectares (89 acres); the potential ponding depth of occupied habitat ranges from 4 cm (1.5 inches) to 1.5 meters (59 inches).

Vernal pool tadpole shrimp populations occur in the Central Valley in California, ranging from east of Redding in Shasta County south to Tulare County, and a vernal pool complex located on the San Francisco Bay National Wildlife Refuge in the City of Fremont, Alameda County.

The vernal pool fairy shrimp and tadpole shrimp are ecologically dependent on seasonal fluctuations in their habitat, such as absence or presence of water during specific times of the year, durations of inundation, and other environmental factors that include specific salinity, conductivity, dissolved solids, and pH levels. Water chemistry is one of the most important factors in determining the distribution of fairy shrimp and tadpole shrimp (Belk 1977, Simovich et al. 1992). The genetic characteristics of these species, and ecological conditions, such as watershed continuity, indicate that populations of these animals are defined by pool complexes rather than by individual vernal pools (Fugate 1992). Therefore, the most accurate indication of the distribution and abundance of these species is the number of inhabited vernal pool complexes. Individual vernal pools occupied by these species are most appropriately referred to as subpopulations. The pools and, in some cases, pool complexes supporting these species are usually small. Man-caused and unforeseen natural catastrophic events such as long-term drought, non-native predators, off-road vehicles, pollution, berming, and urban development, threaten their extirpation at some sites.

The primary historical dispersal method for the vernal pool tadpole shrimp and vernal pool fairy shrimp may have been large-scale flooding resulting from winter and spring rains which allowed the animals to colonize different individual vernal pools and other vernal pool complexes. This dispersal mechanism may no longer function in some areas due to the construction of dams, levees, and other flood control measures, and widespread urbanization within significant portions of the range of this species. Waterfowl and shorebirds are now considered the primary dispersal agents for vernal pool tadpole shrimp and vernal pool fairy shrimp (Brusca and Brusca 1992, Simovich et al. 1992). The eggs of these crustaceans are either ingested (Krapu 1974, Swanson et al. 1974, Driver 1981, Ahl 1991) and/or adhere to the legs and feathers where they are transported to new habitats.

The status of the vernal pool tadpole shrimp and the vernal pool fairy shrimp in the action area of south Sacramento County has been greatly affected by land conversions to agriculture and urban developments. Existing vernal pool habitats within the area are highly degraded and fragmented by construction of many subdivisions and agriculture land conversions, especially to vineyards in the more recent years. Conservation strategies for the area have resulted in small isolated preserves which often are not functioning as the highly integrated vernal pool complexes which are necessary for the dispersal of genetic material between pools. Tadpole shrimp are known to inhabit the two largest seasonal wetlands on the project site.
Environmental Baseline

The listed vernal pool crustaceans are imperiled by habitat loss caused by a variety of human-caused activities, primarily urban development, water supply/flood control projects, and conversion of land to agricultural use. Only a small proportion of the habitat of these species is protected from these threats. Holland (1978) estimated that between 60 and 85 percent of the habitat that once supported vernal pools, the endemic habitat of the vernal pool fairy shrimp, had been destroyed by 1973. In the ensuing years, a substantial amount of remaining habitat has been converted for human uses. Rapid urbanization of the Central Valley of California currently poses the most severe threat to the continued existence of the listed vernal pool crustaceans.

The habitat of the listed vernal pool crustaceans is highly fragmented throughout their ranges due to conversion of natural habitat for urban and agricultural uses. This fragmentation results in small isolated fairy shrimp populations. Ecological theory predicts that such populations will be highly susceptible to extinction due to chance events, inbreeding depression, or additional environmental disturbance (Gilpin and Soule 1986; Goodman 1987a,b). If an extinction event occurs in a population that has been fragmented, the opportunities for recolonization are thought to be greatly reduced due to physical (geographical) isolation from other (source) populations.

The proposed project is located in the Southeastern Sacramento Valley Vernal Pool Region, one of 17 vernal pool regions in the State of California defined by the California Department of Fish and Game in the California Vernal Pool Assessment Preliminary Report (Keeler-Wolf et al. 1998). Of these regions, it is the most threatened by development. The regions were identified according to biological, geomorphological, and soils information. According to the report, “One of the primary assumptions is that these regions are ecologically distinct and that they encompass the full range of variability of vernal pools and species in the state” (Keeler-Wolf et al. 1998).

The Southeastern Sacramento Valley Vernal Pool Region contains almost 15% of the remaining vernal pool grasslands in the State of California, and supports 35% of the known occurrences of the vernal pool fairy shrimp documented in the California Natural Diversity Database. Of the projects authorized by the Service to take vernal pool fairy shrimp and vernal pool tadpole shrimp since the species were federally listed in 1994 to 2000, almost 80% (121 projects) were located within this region. These projects resulted in the loss of more than 37,500 acres of vernal pool grasslands, out of a total of almost 56,000 acres of uplands containing vernal pool fairy shrimp and vernal pool tadpole shrimp habitat.

Sacramento County has vernal pools that occur on three different geological landforms; low terrace, high terrace, and volcanic mudflows. Soil series that support vernal pools include San Joaquin, and Hedge (low terrace), Corning, Fiddyment, Red Bluff, and Redding (high terrace), and Pentz-Haldesville (volcanic mudflow). The project site occurs on the San Joaquin soils series, a low terrace formation; it occurs inside the Urban Services Boundary (USB) of Sacramento County. Of the total 793 acres of low terrace vernal pools in Sacramento County, approximately 358 acres are inside the USB and 435 acres of low terrace vernal pools are outside the USB. The low terrace pools are second in number to high terrace vernal pools which total 1,103 acres in Sacramento County. Volcanic mudflow pools occupy 179 acres in Sacramento County and 140 acres of vernal pools are situated on a small variety of other lands forms.
Developments within the Sacramento County have resulted in both direct and indirect impacts to vernal pools, and have contributed to the loss of vernal pool fairy shrimp and vernal pool tadpole shrimp populations. Although the reduction of federally listed vernal pool crustacean populations has not been quantified, the acreage of lost habitat continues to grow. General and Specific Plans for the Sacramento area have identified significant, unavoidable impacts to biological communities, including elimination of vernal pools, intermittent drainages and other seasonal wetlands. Despite these impacts, city and county governments continue to implement development projects within the area. A Habitat Conservation Plan (HCP) for Sacramento County has been discussed and funded inadequately and irregularly since 1994 but completion of the HCP is not currently envisioned due to funding shortfalls.

Effects of the Proposed Action

The construction of the proposed project would result in the direct loss of 1.96 acres of vernal pool crustacean habitat and the death of an unknown number of vernal pool fairy shrimp and vernal pool tadpole shrimp. A total of 2.14 acres of vernal pool crustacean habitat would be indirectly affected by the proposed project. Indirect impacts would result from project construction within 250 feet of the affected habitat. Additional indirect effects include potential changes in hydrology as a result of the action which may affect the amounts of surface and subsurface waters that may be needed for ponding of the indirectly impacted vernal pools. The minimization measures being implemented such as site grading to direct flows to the wet away from the remaining adjacent wetlands, construction of a small berm around the avoided wetlands to intercept surface sheet flows from the parking lots, construction of stormwater grass filter strips, implementation of a drainage plan, and a 6 foot-tall chain link fence between the parking lot and the avoided wetlands, will assist in lessening the adverse effects of the project. The Service has determined that this level of take associated with the proposed action is not likely to result in jeopardy to the listed wildlife species in this biological opinion or result in destruction or adverse modification of critical habitat.

Cumulative Effects

Cumulative effects are those impacts of future State, Tribal, county, local agency, and private actions that are reasonably certain to occur. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

An undetermined number of future land use conversions and routine agricultural practices that are not subject to Federal authorization or funding may alter the habitat or increase incidental take of vernal pool fairy shrimp and vernal pool tadpole shrimp and are, therefore, cumulative to the proposed project.

Cumulative effects that apply to listed vernal pool crustaceans include: (1) unpredictable fluctuations in amounts of water due to water management of irrigated agriculture; 2) discing, mowing, cultivation, and routine grounds maintenance of upland habitats which decrease water quality of surrounding vernal pools; (3) pesticide and herbicide contaminated runoff from normal agricultural operations and urbanization; and (4) conversion of vernal pools to agricultural use.
Conclusion

After reviewing the current status of the vernal pool crustaceans, the environmental baseline for the action area, the effects of the proposed project, and the cumulative effects, it is the Service’s biological opinion that the issuance of the Corps permit for the proposed project is not likely to jeopardize the continued existence of these species. No critical habitat has been designated for vernal pool crustaceans, and, therefore, none will be destroyed or adversely modified.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. “Take” is defined by the Service as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any such conduct. The Service defines “harass” as an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include, but are not limited to, breeding, feeding and sheltering. The Service defines “harm” to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, and sheltering. “Incidental take” is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), take that is incidental to and not intended as part of the agency action is not considered to be prohibited taking provided such take complies with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary and must be implemented by the Corps so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement. If the Corps (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

Amount or Extent of Take

The Service anticipates that implementation of the proposed action could result in incidental take of listed vernal pool crustaceans. The Service expects that direct take of individuals would be difficult to detect or quantify, because specimens are not easily seen, due to their small body size. Due to the difficulty in quantifying the number of individuals that will be taken as a result of the proposed action, the Service is quantifying take incidental to the proposed action as the amount of habitat that will become unsuitable for listed vernal pool crustaceans as a result of the action. Therefore, the Service estimates that 1.96 acres of habitat for listed vernal pool crustaceans will become unsuitable through direct habitat loss resulting from the proposed action, and that an additional 2.14 acres will become less suitable for listed vernal pool crustaceans as a result of indirect impacts of the proposed action.
Mr. Mike Finan

The Service has developed this Incidental Take Statement based on the premise that the reasonable and prudent measures will be implemented. Upon implementation of the following reasonable and prudent measures, incidental take associated with the construction of the proposed College Market Place on 1.96 acres of habitat for listed vernal pool crustaceans will become exempt from the prohibitions described under section 9 of the Act for direct impacts; in addition, incidental take in the form of harm, harassment, or killing associated with College Market Place on the 2.14 acres of habitat will be exempt from the prohibitions described under section 9 of the Act for indirect impacts as a result of the description of the proposed activities described above.

Effect of the Take

In the accompanying biological opinion, The Service determined that this level of anticipated take is not likely to result in jeopardy to the species or the destruction or adverse modification of critical habitat when the reasonable and prudent measures are implemented.

Reasonable and Prudent Measures

The following reasonable and prudent measures are necessary and appropriate to minimize the impacts of College Market Place project on the vernal pool fairy shrimp and vernal pool tadpole shrimp.

1. The lands bordering the vernal pool preserve will be managed and protected from adverse effects.

2. The loss of suitable vernal pool crustacean habitat will be offset to minimize direct and indirect impacts to vernal pool crustacean habitat.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, the Corps and the College Market Place LLC must comply with the following terms and conditions. These measures are Terms and Conditions which implement the reasonable and prudent measures described above for the protection of vernal pool crustaceans. These terms and conditions are non-discretionary.

1. The following terms and conditions implement reasonable and prudent measure number one for vernal pool crustaceans:
   
   a. re-grade the toe-ditch along Cosumnes River College Boulevard to convey any hydrocarbon sheet flow away from the adjacent vernal pool preserve;
   
   b. the proposed Stockton Boulevard extension, running east-west through the proposed project site, will have a curb along its edge with a series of catch basins to capture sheet flow into a storm water sewer system to convey flows via gravity westward away from the vernal pool preserve;
c. the proposed parking lots along the western edge of the vernal pool preserve will be graded to direct sheet flow away from the vernal pool preserve;

d. the same proposed parking lot will have a curb along its top-slope adjacent to the preserve boundary the western edge of the preserve to intercept any sheet flow;

e. stormwater interceptor vaults and catch basin fossil filters will be installed into the drainage system to improve water quality;

f. additional 25 feet of width will be added to the buffer of the adjacent vernal pool preserve along its western edge;

g. a 6-foot tall vinyl-coated chain link fence will be constructed along the outer edge of the increased buffer area to deter pedestrian and vehicle traffic from entering the vernal pool preserve;

h. the slope from the proposed project site down into the vernal pool preserve will be planted with native vegetation and restrictions will be placed upon the use of herbicides and pesticides along the preserve margin;

i. the existing cul-de-sac which presently extends into the preserve will be removed;

j. the Sacramento City-mandated new road into the proposed project will be moved south to avoid encroachment into the vernal pool preserve.

2. The following terms and conditions implement reasonable and prudent measure number two:

a. creation component: the proposed action will directly affect 1.96 acres and indirectly affect 2.14 acres of habitat for listed vernal pool crustaceans, requiring the purchase of a total 8.38 creation credits at a Service-approved conservation bank prior to project site grading activities.

b. preservation component: the proposed action will directly affect 1.96 acres and indirectly affect 2.14 acres of habitat for listed vernal pool crustaceans, requiring the purchase of 10.34 preservation credits at a Service-approved conservation bank prior to any site grading activities.

Reporting Requirements

The Service's Sacramento Fish and Wildlife Office shall be notified immediately by phone or fax and within three working days in writing of the finding of any dead listed species or any unanticipated harm to the species addressed in this biological opinion. The Service contact person for this is the Chief, Endangered Species Division at (916) 414-6600. Any contractor or employee who during routine operations ro maintenance activities inadvertently kills or injures a
listed wildlife species must immediately report the incident to their representative. This representative must contact the California Department of Fish and Game immediately in the case of a dead or injured animal. The California Department of Fish and Game contact for immediate assistance is State Dispatch (916) 445-0045.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities that can be implemented to further the purposes of the Act, such as preservation of endangered species habitat, implementation of recovery actions, or development of information and data bases. The U.S. Army Corps of Engineers, Sacramento District Office, could assist the Service in planning vernal pool conservation areas in the Sacramento County. In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

REINITIATION - CLOSING STATEMENT

This concludes formal consultation on the proposed action described above. As provided for in 50 CFR Section 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law), and if; (1) the amount or extent of incidental take is exceeded, as previously described, or the requirements under the Incidental Take section are not implemented; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent that was not considered in this opinion; (3) the proposed action is subsequently modified in a manner that causes an effect to listed species that was not considered in this opinion; and/or (4) a new species is listed or critical habitat is designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Please contact Ken Fuller or Justin Ly at (916) 414-6645, if you have any questions.

Sincerely,

Cay C. Goude
Acting Field Supervisor

cc:
ARD (ES), Portland, OR
CDFG, Region 2, Rancho Cordova, CA (Attn: Ms. Terry Roscoe)
Doug Sutherland, Citadel Equities Group LLC, Roseville, CA
Greg Thatch, Law Office of Greg Thatch, Sacramento, CA
Jim Stewart, ECORP Inc., Roseville, CA
LITERATURE CITED


February 10, 2003, letter from ECORP Consulting to The Hoyt Company in response to biological resource-related questions from Brad Shirhall of the City of Sacramento
February 10, 2003

Wendy Hoyt
The Hoyt Company
660 J Street, Suite 444
Sacramento, California 95814

RE: College Square

Dear Wendy:

We are providing you with the following comments in response to Brad Shirhall's recent email sent to you on January 24, 2003. At the request of Mr. Shirhall, we are forwarding the following information directly to you and Bradley Cutler.

In his recent correspondence, Mr. Shirhall confirmed the receipt of the wetland delineation of the College Square property, but identified two outstanding items that he indicated may delay completion of the EIR. Following is an excerpt from his email identifying required information. Our responses/points of clarification follow each item.

1. "Wetland delineation for parcels 117-0182-019, 020, and 021. DONE"

Mr. Shirhall has confirmed receipt of the wetland delineation. The delineation has been submitted to the U.S. Army Corps with a request for verification. We will submit a copy of the verification letter as soon as it is available.

2. "Rare Plant survey as well as a survey for other federally listed fauna for parcels 117-0182-019, 020, and 021. NOT DONE"

No surveys for federally-listed fauna or flora have been conducted on the subject parcels to date, as such surveys need to take place within appropriate survey windows. The vernal pools on site provide potential habitat for the federally listed vernal pool fairy shrimp and tadpole shrimp. Given that USFWS protocol calls for two years of wet season or one year of dry season (cyst) survey combined with a wet season survey the applicant is not in a position to conduct such surveys. Furthermore it is likely that the USFWS would not authorize such surveys, but rather assume presence given the presence of these species in the watershed. The vernal pools also represent potential habitat for State and federally-listed plants. Surveys for these species have been scheduled but cannot be conducted until spring, during the appropriate blooming period (e.g. April-June). It should be noted, however, that these surveys are not required to complete the EIR or other CEQA documents. CEQA documents may simply require that these surveys be done and appropriate authorizations obtained prior to construction.
3. "Copies of any correspondence between ECORP/Citadel et. al. and the U.S. Army Corps of Engineers and/or the US Fish and Wildlife Service regarding waters of the US jurisdiction determinations and/or Section 7 or Section 10 consultations for parcels 117-0182-019, 020, and 021 – NOT DONE"

In regards to any correspondence for parcels 117-0182-019, 020, 021.

To date, only three correspondences between ECORP/Citadel et. al. and the U.S. Army Corps of Engineers and/or the U.S. Fish and Wildlife Service regarding waters of the US jurisdiction determinations and/or Section 7 or 10 consultations have occurred in reference to parcels 117-0182-019, 020, 021; also known as the College Square project site. On June 13, 2002 ECORP sent a letter to Justin Ly of the U.S. Fish and Wildlife Service indicating changes to the original College Market Place project and requesting verification that these changes would not require re-initiation of consultation with the Service (attached). In this letter it was stated that the 18 acre College Square project site directly to the south was being conceptually planned as a second "phase" to the College Market Place project, but should not be included under the Incidental Take Permit. The Service responded on July 31, 2002 indicating that the issued permit was valid and re-initiation of consultation was not necessary (attached). On December 13, 2002, ECORP submitted a wetland delineation for the College Square project to Justin Cutler of the U.S. Army Corps of Engineers (attached). Presently the Corps has initiated no further correspondence regarding this wetland delineation.

If you have any questions, please call me at (916) 782-9100.

Sincerely,

[Signature]

Jim Stewart
President

Attachments

Cc: Mr. Bradley Cutler / Citadel Equities Group LLC
June 13, 2002

Mr. Justin Ly
U.S. Fish and Wildlife Service
2800 Cottage Way, W-2605
Sacramento, CA 95825

RE: College Marketplace (USFWS 1-1-01-F-0019)

Dear Mr. Ly,

This letter is in reference to the College Marketplace property. Your office issued an Incidental Take Permit, February 7, 2002, to address adverse impacts to fairy shrimp and tadpole shrimp that would result from the proposed project.

Late in the entitlement process for the College Marketplace project the City of Sacramento changed entitlement guidelines related to properties within the sphere of influence of a proposed Light Rail Station. Rather than support the rezone of the entire property to retail uses the city now seek to retain a portion of the property in its present zone for the construction of multi-family residential.

In addition, City staff stipulated that a separate 18 acre site located south of the subject site be conceptually planned at this time. These 18 acres will be handled as a subsequent request and are not part of the area covered by the Incidental Take Permit. The location of this future area which is not a part of the Take Permit area is shown on the attached site plan.

Because of a partial change in one of the land uses referenced in the application that was reviewed by your office, and issued an Individual Take Permit, the applicant (College Marketplace LLC) asked ECORP to contact your office for further direction in this matter, so as to remain in compliance with the issued permit. Bradley Cutler of College Marketplace LLC and I discussed the issues with Ken Fuller of your office on May 24, 2002. Ken was extremely helpful and suggested that I provide a written explanation to enable you to provide us with confirmation that our revised plans are consistent with the permit.

Below is a brief history of the project followed by the pertinent issues.
College Square History

The developers for College Square, College Marketplace LLC, submitted an application for a 43 acre retail project in late 2000 to the City of Sacramento. The developers proposed to rezone the land from mixed commercial and residential uses to a Planned Unit Development containing only retail uses. They submitted new community and new general plan amendment, new PUD plan, and a tentative map to the City of Sacramento in the fall of 2000. The developers completed their application in September 2001. An EIR consultant was selected in early December 2001 and work commenced to complete the entitlement process.

In March 2002, the City of Sacramento planning department then informed the developers that they could only support the rezone of 5 acres of the southerly 20 acre portion of the site to retail uses. The 15 acre balance of the site would have to be remained in its current zone for the development of multi-family housing.

The cause of the planning department redirection regarding large retail uses occurred after the decision by the City Council to reject an application by Target Stores for a large retail use adjacent to a planned future light rail station in the North Natomas area of Sacramento. The City Council believed that large retail was not appropriate adjacent to light rail stations as it would not provide the ridership needed for light rail and that they would potentially have a negative impact on that. Council members decided that other more transit oriented uses such as apartments or offices would be more appropriate.

College Square had a similar proximity to a future light rail station. The planning department “suggested” that an alternative proposed use on a portion of the College Marketplace site would be necessary for the project to receive their support. They proposed that 15 acres of the site be retained in its present zone for multi-family uses and not be converted to retail uses.

Heading the “suggestion”, the developers of College Marketplace prepared a modified design on the southern parcel to reflect the current thinking of the planning department. The revised design reduced the retail uses on the parcel from 248,000 sq ft to 42,500 sq ft and increased the residential from zero to approximately 300 residential units in the form of senior assisted units, independent units and multi-family units. The balance of the College Marketplace project remains unchanged from the application made to you in the application for the Incidental Take Permit for use as a retail development.
The permitting issues are in two parts as follows:

43 acre Subject property

- Subject property (±43 acres) was originally planned for large retail.
- Project begins review under CEQA.
- City planning staff "suggests" changes on a portion of the College Marketplace site plan to retain residential uses due to the properties location near a future light rail station.
- The applicant is concerned that redesign of the site, within the boundaries of the design submitted to you, is consistent with the findings of the Biological Opinion from USI-WS
- There is no increase in impacts to aquatic invertebrates or wetlands with revised site design which covers exactly the same area as that of the original application.
- Applicant is requesting a letter from your office acknowledging that redesigned site plan is consistent (in terms of adverse affects to listed invertebrates) with the 'footprint' reviewed by your office during Section 7 Consultation, and that the Biological Opinion remains current and valid.

±18 acre property (off-site, but contiguous)

- Property (±18 acres) which is southwest of the subject property, per City, must have a conceptual site design as part of College Marketplace review to assure compatible uses adjacent to the future light rail station.
- Development of ±18 acre property may be years away, the subject property is not directly linked to this future development.
- Applicant will proceed with City-CEQA review of the ±18 area. Applications to federal and state natural resource agencies will be a separate process and not developed as a part of the College Marketplace project.

Mr. Ly, we are asking that you please review the enclosed redesigned site plan of a portion of the ±43 acre College Marketplace project. All roadway, utility and other design criteria in the original application remain unchanged and College Marketplace will fully abide by the requirements of the Take Permit issued pursuant to the original design.
Assuming that you agree that the site plan redesign is not inconsistent with the intent, impacts and proposed mitigation measures, we ask that you send us a letter within 30 days confirming that the plans are consistent. This letter is essential to the successful City/CEQA review of the property.

We apologize for revisiting a project that has already been issued a Biological Opinion. The change was imposed upon the developer by a change in policy by the City Council and planning department of the City of Sacramento. Had the applicant known about the City's preference for land uses near future light rail stations the original plan would have been modified prior to your review of the plan for the Take Permit.

If you have any questions, please call me at (916) 782-9100 or jstewart@ecorpconsulting.com.

Thank you,

Jim Stewart
President

CC: Mr. Ken Fuller, U.S. Fish and Wildlife Service
    Mr. Bradley Cutler, College Marketplace LLC
    Mr. Doug Sutherland, College Marketplace LLC
    Mr. Greg Thatch, Law Offices of Gregory D. Thatch
    Ms. Justin Cutler, US Corp of Engineers
Clear overlays (maps)
July 31, 2002

Mr. Jim Stewart
ECORP Consulting, Inc.
2260 Douglas Blvd., Suite 160
Roseville, California 95661

Subject: Proposed College Marketplace Project, Sacramento County, California.

Dear Mr. Stewart:

This is in response to your letter dated June 13, 2002, requesting the U.S. Fish and Wildlife Service (Service) review changes to the proposed College Marketplace Project (project) in Sacramento County, California. In that letter, you discussed changes to the original design due to the City of Sacramento's suggested alternative for the project.

The original proposed project design called for a mixed small business complex with associated parking on approximately a 47-acre site of open lands west of Consumes River Community College and east of California State Highway 99 in South Sacramento County. The developers, College Marketplace, LLC., proposed to rezone the parcel of land from a mixed commercial and residential use to a planned unit development (PUD) containing only retail. The City declined the application to rezone the entire parcel, leaving 15 acres zoned as residential. The project was subsequently redesigned to incorporate the residential component into the 47-acre proposed project.

Under a permit application with the Army Corps of Engineers, College Marketplace proposed to directly fill 1.96 acres of wetlands (1.21 acres of seasonal marsh, 0.59 acre of seasonal wetland and 0.16 acre of vernal pool) and indirectly impact 2.14 acres of wetlands (1.85 acres of vernal pools and 0.29 acre of seasonal marsh). College Market Place, LLC., assumed presence of listed invertebrates in all wetlands on the proposed project site and proposed to compensate for effects to listed invertebrate habitat by purchasing 10.34 preservation credits and 8.38 creation credits at a Service-approved conservation bank prior to start of site grading. Although the design of the proposed project changed, the project footprint remains the same, as do the impacts to the wetlands at the site.

ECORP Consulting requested the Service review the changes to the proposed project and provide further guidance in the matter. A letter explaining that the revised plans are consistent with the issued permit was provided to the Service.
Mr. Jim Stewart

It is the Service's opinion that the proposed project footprint has not changed from the previously approved plan and does not necessitate reinitiation of consultation. No change in the amount of acreage of wetlands are affected by the new project design and site uses. Therefore, the Service concurs with the determination that the new proposed project design is consistent with the intent, impacts and proposed conservation measures previously set forth.

This concludes our review of the modifications to the proposed College Marketplace Project pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act). As provided in the Act, College Marketplace, LLC. should contact the Service if: (1) the project is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the biological opinion; or (2) a new species is listed or critical habitat designated that may be affected by the project.

If you have any questions regarding this letter, please contact Justin Ly of my staff at (916) 414-6645.

Sincerely,

[Signature]

Jan C. Knight
Chief, Endangered Species Division

CC:
College Marketplace, LLC., Sacramento, CA (Attn: Bradley Cutler)
College Marketplace, LLC., Sacramento, CA (Attn: Doug Sutherland)
Law Offices of Gregory D. Thatch, Sacramento, CA (Attn: Greg Thatch)
U.S. Army Corps of Engineers, Sacramento, CA (Attn: Justin Cutler)
LETTER OF TRANSMITTAL

DATE: December 13, 2002

TO: Mr. Justin Cutler
    U.S. Army Corps of Engineers
    1325 J Street, 14th Floor
    Sacramento, CA 95814

CC: Mr. Bradley Cutler / Citadel Equities Group, LLC

FROM: Jim Stewart

RE: College Square (20-Acre)

WE ARE SENDING:

CAD PLOT (S)  =>  REPORT (S)
BLUEPRINTS
DISKETTE
AGENCY CORR.

DELIVERED BY:

OVERNIGHT
FEDERAL EXPRESS
U.S. MAIL
HAND

REMARKS:

Please find enclosed the Wetland Delineation for the College Square (20-Acre) project. If you have any questions, please feel free to call me at (916) 782-9100.

SIGNED: Jim Stewart
President

2260 Douglas Blvd., Suite 160
Roseville, California  95661
Tele: (916) 782-9100
Fax: (916) 782-9134
WETLAND DELINEATION

FOR

COLLEGE SQUARE (20-ACRE)

(CITY OF SACRAMENTO, SACRAMENTO COUNTY, CALIFORNIA)

December 13, 2002

Prepared for:
Granite Bay Holdings

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
February 14, 2003, letter from ECORP Consulting to U.S. Army Corps of Engineers regarding additional data collection points
February 14, 2003

Mr. Michael Finan
Chief, Delta Office
U.S. Army Corps of Engineers
1325 J Street
Sacramento, CA 95814-2922

Re: College Square WD (Regulatory Branch 20020078)

Dear Mr. Finan:

In response to your letter dated January 15, 2003 to Larry John of Granite Bay Holdings, we have taken additional data points within the area as you requested. The data collection was conducted on February 14, 2003. Three separate data collection points were taken within the area, and the data sheets are included for your review. In addition, the data collection locations and GPS coordinates are included on the attached revised wetland delineation map dated February 14, 2003). In summary, the results of the data collection indicate that the necessary three criteria for wetland determination are not present within that specific location.

Please call me at your earliest convenience to schedule a field verification.

Sincerely,

[Signature]
Keith C. Kwan
Senior Biologist

Attachments

cc: Mr. Bradley Cutler / Citadel Equities Group, LLC
ORP Consulting, Inc.
IRONMENTAL CONSULTANTS

xt/Site: College Square
licant/Owner: GBH
nty: Sacramento, CA
Section/Township/Range: T7N, R3E, Sec. 15

Date: 2/14/03
Sample Point: S
Field Investigator(s): H. Buchalski
Plant Community: Annual grassland

normal environmental conditions exist site? Yes ☐ No ☐ If no, explain:
ncal Situation? Yes ☐ No ☐ Explain: dislead field
his a potential Problem Area? Yes ☐ No ☐ Explain:

HYDROPHYTIC VEGETATION? Yes ☐ No ☐

ETATION

<table>
<thead>
<tr>
<th>Dominant Species</th>
<th>Ind. Status</th>
<th>Stratum</th>
<th>Rel. % Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>VUL BRO</td>
<td>FACY</td>
<td>H</td>
<td>50</td>
</tr>
<tr>
<td>Un-DB assessed</td>
<td></td>
<td>H</td>
<td>15</td>
</tr>
</tbody>
</table>

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 2 of 2 = 100 %

comments:

DROLOGY

Recorded Data: Yes ☐ No ☐ If yes,

Depth of surface water: 0 (in.)
Depth to saturated soil: 0 (in.)

WETLAND HYDROLOGY? Yes ☐ No ☐

Primary Indicators: ☐ Inundated ☐ Satuated in Upper 12 in. ☐ Water Marks ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other

Comments:

HYDIC SOILS? Yes ☐ No ☐

ULS

Series/Phase: Z17 San Joaquin - Coastal complex, levelled, 0 to 1 % slopes

Drainage Class: *mod. well drained

Taxonomy [Subgroup]: Fine: mixed, thermic Aeric, Ustorthods

Confirm Map Type: Yes ☐ No ☐

Histosol ☐ Histic Epipedon ☐ Sufidic Oids ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydic Soils List ☐ Other

Inclusions [Series/Phase]: Salt components in depressions

On Hydic Soils List: Yes ☐ No ☐

Depth (in.): 18

<table>
<thead>
<tr>
<th>Horizon</th>
<th>Matrix Color</th>
<th>Motile Color</th>
<th>Motile (Abund/Contrast/Size)</th>
<th>Texture, Concretions, Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>OYR 3/2</td>
<td>none</td>
<td>♦ clay loam</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

WETLAND / WATERS DETERMINATION? Yes ☐ No ☐

Rationale: No criteria were met.

General comments: Wetland Type: Upland

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CORP Consulting, Inc.

VIRONMENTAL CONSULTANTS

Date: 2/14/03  Sample Point: 6
Field Investigator(s): M. Bucholski
Plant Community: Annual grassland
Section/Township/Range: T7N, R7E, Sec 15

normal environmental conditions exist site? Yes  No  
If no, explain: 

Habitat Situation? Yes  No  
Explain: disked field

HYDROPHYTIC VEGETATION? Yes  No  

ETATION

<table>
<thead>
<tr>
<th>Dominant Species</th>
<th>Ind. Status</th>
<th>Stratum</th>
<th>Rel. % Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Un-3D grass</td>
<td>H</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dominant Species</th>
<th>Ind. Status</th>
<th>Stratum</th>
<th>Rel. % Cover</th>
</tr>
</thead>
</table>

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 

Comments:

DROLOGY

recorded Data: Yes  No  
If yes,

Depth of surface water: None  (in.)  
Depth to free water in pit: None  (in.)  
Depth to saturated soil: 1 2  (in.)

primary Indicators: □ Inundated □ Saturated in Upper 12 in. □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands

secondary Indicators (2 or more required):

□ Oxidized Root Channels in Upper 12 in. □ Water-stained Leaves □ Local Soil Survey Data □ FAC-Neutral Test □ Other

Comments:

WETLAND HYDROLOGY? Yes  No  

ILS

series/Phase: R7 San Joaquin- Est complex, leveled 8 to 1 %o slopes  
Drainage Class: wet, well drained

[Subgroup]: Fine, mixed, thermic Abruptic Dystruxerrals

confirm Map Type: Yes  No  

Histosol □ Histic Epipedon □ Sulfidic Odor □ Aquic Moisture Regime □ Reducing Conditions □ Gleyed/Low Chroma Colors □ Concretions

□ High Organic Content in Surface Layer in Sandy Soils □ Organic Streaking in Sandy Soils □ Listed on Hydric Soils List □ Other

inclusions [Series/Phase]: Galt components in depressions

On Hydric Soils List: Yes  No  

Depth (ft): 18

Horizon | Matrix Color | Motile Color | Motile (Abund/Contr/Size) | Texture, Concretions Structure |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10YR 5/2</td>
<td>10YR 3/2</td>
<td>abundant</td>
<td>clay loam</td>
</tr>
</tbody>
</table>

Comments:

DECISION *  

WETLAND / WATERS DETERMINATION? Yes  No  

Rationale: Two of three criteria were not met.

General comments:

Wetland Type: Upland
ROUTINE WETLAND DELINEATION

LOCATION: College Square

Date: 2/14/03  Sample Point: 7

Field Investigator(s): M. Buchelechi

Plant Community: Annual grassland

Section/Township/Range: T7N, R5E, Sec. 15

Significant/Owner: GBH

State: CA

Ad(s): Florida, CA

Normal environmental conditions exist site? Yes [ ] No [ ] If no, explain:

Physical Site? Yes [ ] No [ ] Explain: disked field

Is this a potential Problem Area? Yes [ ] No [ ] Explain:

HYDROPHYTIC VEGETATION? Yes [ ] No [ ]

<table>
<thead>
<tr>
<th>Dominant Species</th>
<th>Ind. Status</th>
<th>Stratum</th>
<th>Rel. % Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIW EZO</td>
<td>FACUL</td>
<td>H</td>
<td>25</td>
</tr>
<tr>
<td>TAR OFF</td>
<td>FACUL</td>
<td>H</td>
<td>15</td>
</tr>
<tr>
<td>GEN SOL</td>
<td>N/L</td>
<td>H</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 2 of 3 = 66.67%

Comments:

WETLAND HYDROLOGY? Yes [ ] No [ ]

Recorded Data: Yes [ ] No [ ] If yes,

Depth of surface water: None (in.)  Depth of free water in pit: None (in.)  Depth to saturated soil: None (in.)

Primary Indicators: Inundated [ ] Saturated in Upper 12 in. [ ] Water Marks [ ] Drift Lines [ ] Sediment Deposits [ ] Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

[ ] Oxidized Root Channels in Upper 12 in.  [ ] Water-stained Leaves [ ] Local Soil Survey Data [ ] FAC-Neutral Test [ ] Other

Comments:

HYDRIC SOILS? Yes [ ] No [ ]

Series/Phase: 217 San Joaquin - Galt Complex, levelled, 0 to 1% slopes

Drainage Class: MOD, well drained

Taxonomy [Subgroup]: Fine, mixed, thermic, Abruptic, Durixerolls

Confirm Map Type: Yes [ ] No [ ]

[ ] Histosol  [ ] Histric Epipedon  [ ] Sulfic Odor  [ ] Aquic Moisture Regime  [ ] Reducing Conditions  [ ] Gleyed/Low Chroma Colors  [ ] Concretions

[ ] High Organic Content in Surface Layer in Sandy Soils  [ ] Organic Streaking in Sandy Soils  [ ] Listed on Hydric Soils List  [ ] Other

Inclusions [Series/Phase]:

Galt components in depressions

On Hydric Soils List: Yes [ ] No [ ]

Depth (in.) 12

Horizon A

Matrix Color 10YR 3/2

Mottle Color 10YR 4/6

Mottle (Abund/Contrast/Size) abundant

Texture, Concentrations, Structure clay loam

Comments:

WETLAND/WATERS DETERMINATION? Yes [ ] No [ ]

Decision *

Two of three criteria not met.

Rationale:

General comments:

Wetland Type: Upland

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### Herbaceous Cover / Dominance Work Sheet

<table>
<thead>
<tr>
<th>Species Observed</th>
<th>Actual Cover</th>
<th>Relative Cover</th>
<th>Cumulative Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>T. officinale</em></td>
<td>15</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td><em>C. solstitialis</em></td>
<td>15</td>
<td>15</td>
<td>55</td>
</tr>
<tr>
<td><em>Vicia sp.</em></td>
<td>10</td>
<td>10</td>
<td>65</td>
</tr>
<tr>
<td><em>Rumex crispus</em></td>
<td>5</td>
<td>5</td>
<td>85</td>
</tr>
<tr>
<td><em>C. dissectum</em></td>
<td>5</td>
<td>5</td>
<td>90</td>
</tr>
<tr>
<td><em>H. virescens</em></td>
<td>5</td>
<td>5</td>
<td>95</td>
</tr>
</tbody>
</table>

**Cover:**
- Vegetation: 100%
- Bare Ground: 0%
- Rocks: 0%
- Other: 0%

**Total = 100%**

### Indicator Status

- FACU
- FACU
- N/L
- N/L
- N/L

### Dominants

- *T. officinale*
- *C. solstitialis*
- *Vicia sp.*
- *Rumex crispus*
- *C. dissectum*
<table>
<thead>
<tr>
<th>Species Observed</th>
<th>Actual Cover</th>
<th>Relative Cover</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V. bromoides</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>C. solstitialis</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Holocarpha virgata</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Lolium perenne</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>T. caput - medusa</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>UN-ID grass</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eremocarpus catigerus trace</td>
<td>trace</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL SUM (Σ) = 100%**

<table>
<thead>
<tr>
<th>Species (Descending Order)</th>
<th>Relative Cover</th>
<th>Cumulative Cover</th>
<th>Indicator Status</th>
<th>Dominants</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. bromoides</td>
<td>40</td>
<td>40</td>
<td>FAC W*</td>
<td></td>
</tr>
<tr>
<td>UN-ID grass</td>
<td>20</td>
<td>60</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>C. solstitialis</td>
<td>10</td>
<td>70</td>
<td>FAC W</td>
<td></td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>10</td>
<td>80</td>
<td>FAC</td>
<td></td>
</tr>
<tr>
<td>L. perenne</td>
<td>8</td>
<td>88</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>7</td>
<td>95</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>Holocarpha virgata</td>
<td>3</td>
<td>98</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>T. caput - medusa</td>
<td>2</td>
<td>100</td>
<td>N/L</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL SUM (Σ) = 100%**
HERBACEOUS COVER / DOMINANCE WORK SHEET

<table>
<thead>
<tr>
<th>Species Observed</th>
<th>Actual Cover</th>
<th>Relative Cover</th>
<th>Cover:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lolium perenne</td>
<td>trace</td>
<td>20</td>
<td>Vegetation</td>
</tr>
<tr>
<td>Vulpia bromoides</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>4</td>
<td>2</td>
<td>Bare Ground</td>
</tr>
<tr>
<td>Raphanus sativus</td>
<td>2</td>
<td>2</td>
<td>Rocks</td>
</tr>
<tr>
<td>Tamuscomum officinale</td>
<td>5</td>
<td>5</td>
<td>Other</td>
</tr>
<tr>
<td>Holocarpa virgata</td>
<td>5</td>
<td>5</td>
<td>TOTAL = 100%</td>
</tr>
<tr>
<td>Erodicaea sp.</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>un-identified grass seedling</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Geranium dissectum</td>
<td>trace</td>
<td>trace</td>
<td></td>
</tr>
<tr>
<td>Trifolium hirtum</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Erodium botrys</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Brasira nigra</td>
<td>trace</td>
<td>trace</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL SUM (Σ) = 100%

---

<table>
<thead>
<tr>
<th>Species (Descending Order)</th>
<th>Relative Cover</th>
<th>Cumulative Cover</th>
<th>Indicator Status</th>
<th>Dominants</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. bromoides</td>
<td>50</td>
<td>50</td>
<td>FACU*</td>
<td>x</td>
</tr>
<tr>
<td>un-identified grass</td>
<td>15</td>
<td>65</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>7</td>
<td>72</td>
<td>FACU</td>
<td></td>
</tr>
<tr>
<td>T. officinale</td>
<td>5</td>
<td>77</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>H. virgata</td>
<td>5</td>
<td>82</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>T. hirtum</td>
<td>5</td>
<td>87</td>
<td>FACU*</td>
<td></td>
</tr>
<tr>
<td>Erodium botrys</td>
<td>5</td>
<td>92</td>
<td>FACU -</td>
<td></td>
</tr>
<tr>
<td>R. crispus</td>
<td>4</td>
<td>96</td>
<td>UPL</td>
<td></td>
</tr>
<tr>
<td>R. sativus</td>
<td>2</td>
<td>98</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>Erodicaea sp.</td>
<td>2</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL SUM (Σ) = 100%
April 27, 2000, memorandum from Sandra Starr of ECORP Consulting regarding rare plant survey conducted for Cosumnes River Boulevard project site
Memorandum

Date: April 27, 2000
To: File
From: Sandra Starr

RE: Rare Plant Survey for Cosumnes River Blvd.

On April 07 and 11, 2000, ECORP Consulting, Inc. biologists, Susan Capell and Sandra Starr, conducted a rare plant survey of the proposed Cosumnes River Blvd. project site. The target species of the survey were Bogg’s Lake hedge-hyssop (Gratiola heterosepala), a California state endangered species, dwarf downingia (Downingia pusilla), a California Native Plant Society (CNPS) List 4 species, Greene’s legenere (Legenere limosa), a federal Species of Concern and a CNPS List 1B species, and Sanford’s arrowhead (Sagittaria sanfordii), also a federal Species of Concern and CNPS List 1B species. Surveys were conducted by walking transects through and around all potential habitat on-site (i.e., vernal pool, seasonal wetland, seasonal marsh, and constructed pond). Plant species and cover values were recorded within a number of representative wetlands on-site. In addition, a cumulative species list was generated for the site while walking transects through the wetlands and intervening upland areas. Neither Bogg’s Lake hedge-hyssop, dwarf downingia, Greene’s legenere, or Sanford’s arrowhead were found within the subject project site. A secondary survey for the presence of Greene’s legenere and Sanford’s arrowhead, as well as a complete survey for the presence of Sacramento Orcutt grass (Orcuttia viscida) and slender Orcutt grass (Orcuttia tenuis) will be conducted between May and June of this season.

### FLORISTIC MONITORING DATA SHEET

**Date:** 2023-01-17

**Wetland No.:**

**Location:** [Insert Location Information]

**Wetland Type:** ( ) VP ( ) SW ( ) M ( ) Constructed ( ) Reference

**Biologist(s):** [Insert Biologist(s) Name]

**Cover - Vegetation:**

<table>
<thead>
<tr>
<th>Bare Ground</th>
<th>Rocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

**Other (specify):** [Insert Other Information]

**TOTAL:** 100%

### PLANTS OBSERVED:

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Plant Name</th>
<th>Plant Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geranium molle</td>
<td>Geranium spp.</td>
<td>Glyceria spp.</td>
</tr>
<tr>
<td>Gaura lindheimeri</td>
<td>Gratiola bracteata</td>
<td>Gratiola hystrophala</td>
</tr>
<tr>
<td>Helenium autumnale</td>
<td>Holocarpha virgata</td>
<td>Hordeum brachyantherum</td>
</tr>
<tr>
<td>Hordeum marinum</td>
<td>Hordeum marinum</td>
<td>Hypochaeris glabra</td>
</tr>
<tr>
<td>Isoetes nutallii</td>
<td>Isoetes nutallii</td>
<td>Juncus arcticus</td>
</tr>
<tr>
<td>Juncus balticus</td>
<td>Juncus balticus</td>
<td>Juncus capitatus</td>
</tr>
<tr>
<td>Juncus uncialis</td>
<td>Juncus xiphioideus</td>
<td>Juncus spp.</td>
</tr>
<tr>
<td>Lacuna serriola</td>
<td>Lasthenia californica</td>
<td>Lasthenia fremontii</td>
</tr>
<tr>
<td>Lasthenia glabrata</td>
<td>Layia fremontii</td>
<td>Legrener limosa</td>
</tr>
<tr>
<td>Leptosiphon latipes</td>
<td>Leiophyllum nudum</td>
<td>Leptochloa fascicularis</td>
</tr>
<tr>
<td>Leymus triticoides</td>
<td>Lilaeas cilioides</td>
<td>Limnanthes alba</td>
</tr>
<tr>
<td>Limnanthes douglasii</td>
<td>Limnanthes douglasii</td>
<td>Limnanthes secalis</td>
</tr>
<tr>
<td>Lolium perenne</td>
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<td>Mimulus tricolor</td>
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### Modified Braun-Blanquet Cover Scale:

0 = <1%, 1 = 1 - 5%, 2 = 6 - 25%, 3 = 26 - 50%, 4 = 51 - 75%, 5 = 76 - 100%

### NOTES / COMMENTS:
### FLORISTIC MONITORING DATA SHEET

**Location:** Cosmos River Blvd 2

**Wetland Type:** VP SW M

**Date:** 4/7/00

**Biologist(s):** SF 185

**Reference:**

**Cover ~ Vegetation:**

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<td>040 120 040 Pogonomy douglasii</td>
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<td>040 020 040 Draba annua</td>
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<td>040 020 040 Polygonum arenarium</td>
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<td>040 020 040 Polygonum spp.</td>
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<tr>
<td>020 030 030 Polygono monspeliensis</td>
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<tr>
<td>020 030 030 Psilocalyx brevissimus</td>
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<tr>
<td>040 040 020 Psilocalyx oregonus</td>
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<tr>
<td>040 040 020 Psilocalyx tenella</td>
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<tr>
<td>040 040 020 Ranunculus aquatilis</td>
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<td>040 040 020 Xanthium strumarium</td>
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**Notes / Comments:**

Modified Braun-Blanquet Cover Scale: 0 = <1%, 1 = 1 - 5%, 2 = 6 - 25%, 3 = 26 - 50%, 4 = 51 - 75%, 5 = 76 - 100%
**FLORISTIC MONITORING DATA SHEET**

**Wetland No:** 3  
**Location:** Losunas Bridge  
**Wetland Type:** ( ) VP ( ) SW ( ) M  
( ) Constructed ( ) Reference

**Date:** 4/17/92  
**Biologist(s):** SSAC  
**Cover ~ Vegetation:** 40  
Bare Ground: 36  
Rocks: 26  
Other (specify): 36  
**TOTAL:** 100%

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**NOTES / COMMENTS:**

---

**Modified Braun-Blanquet Cover Scale:** 0 = <1%, 1 = 1 - 5%, 2 = 6 - 25%, 3 = 26 - 50%, 4 = 51 - 75%, 5 = 76 - 100%
FLORISTIC MONITORING DATA SHEET

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**PLANTS OBSERVED:**

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**Cover - Vegetation:**

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**TOTAL:** 100%

**NOTES / COMMENTS:**

Modified Braun-Blanquet Cover Scale: 0 = <1%, 1 = 1 - 5%, 2 = 6 - 25%, 3 = 26 - 50%, 4 = 51 - 75%, 5 = 76 - 100%
FLORISTIC MONITORING DATA SHEET

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<td>Rocks:</td>
<td></td>
</tr>
<tr>
<td>Other (specify):</td>
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<tr>
<td>TOTAL:</td>
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PLANTS OBSERVED:

<table>
<thead>
<tr>
<th>Geranium molle</th>
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<tbody>
<tr>
<td>Geranium spp.</td>
</tr>
<tr>
<td>Gymecia spp.</td>
</tr>
<tr>
<td>Onaphalium spp.</td>
</tr>
<tr>
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<td>Gratiola heterosepala</td>
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<tr>
<td>Hemizonia fitchii</td>
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<tr>
<td>Holocarpha virgata</td>
</tr>
<tr>
<td>Hordeum brachyantherum</td>
</tr>
<tr>
<td>Hordeum marinum</td>
</tr>
<tr>
<td>Hordeum murinum</td>
</tr>
<tr>
<td>Hypochaeris glabra</td>
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<td>Isoetes hollaisi</td>
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<tr>
<td>Isoetes nuttalii</td>
</tr>
<tr>
<td>Isoetes oocauti</td>
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<tr>
<td>Juncus balearis</td>
</tr>
<tr>
<td>Juncus bufofernas</td>
</tr>
<tr>
<td>Juncus cephalophorus</td>
</tr>
<tr>
<td>Juncus uncials</td>
</tr>
<tr>
<td>Juncus xiphoides</td>
</tr>
<tr>
<td>Juncus spp.</td>
</tr>
<tr>
<td>Lactuca serriola</td>
</tr>
<tr>
<td>Lasthenia californicorum</td>
</tr>
<tr>
<td>Lasthenia fremontii</td>
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<td>Lasthenia glaberrima</td>
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<tr>
<td>Layia fremontii</td>
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<tr>
<td>Legenera ilicosa</td>
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<tr>
<td>Lepidium latipes</td>
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<tr>
<td>Lepidium nitidum</td>
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<tr>
<td>Leptochloa fascicularis</td>
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<td>Lilaea scilloides</td>
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<td>Limnanthes douglasii</td>
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<td>Limosella acutili</td>
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<td>Lolium perenne</td>
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<tr>
<td>Lupinus bicolor</td>
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<tr>
<td>Lythrum hyssopyllorum</td>
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<tr>
<td>Marsilea vestita</td>
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<tr>
<td>Medicago polymorpha</td>
</tr>
<tr>
<td>Mentha spp.</td>
</tr>
<tr>
<td>Mimulus guttatus</td>
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<tr>
<td>Mimulus micromus</td>
</tr>
<tr>
<td>Montis fontana</td>
</tr>
<tr>
<td>Myosurus minimus</td>
</tr>
<tr>
<td>Navarretia intertexta</td>
</tr>
<tr>
<td>Navarretia leucopetala</td>
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<tr>
<td>Phalaris lemnornil</td>
</tr>
<tr>
<td>Phalaris sp.</td>
</tr>
<tr>
<td>Phylla nodiflora</td>
</tr>
<tr>
<td>Plantago asiatica</td>
</tr>
<tr>
<td>Plantago elongata</td>
</tr>
</tbody>
</table>

Modified Braun-Blanquet Cover Scale: 0 = <1%, 1 = 1 - 5%, 2 = 6 - 25%, 3 = 26 - 50%, 4 = 51 - 75%, 5 = 76 - 100%

NOTES / COMMENTS:
**FLORISTIC MONITORING DATA SHEET**

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<tr>
<th>Wetland No.:</th>
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<td>Location:</td>
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<tr>
<td>Wetland Type:</td>
<td>( ) VP ( ) SW ( ) M</td>
</tr>
<tr>
<td>( ) Constructed</td>
<td>☑</td>
</tr>
</tbody>
</table>

| Date: | 4/1/2007 |
| Cover - Vegetation: | 75% |
| Bare Ground: | 25% |
| Rocks: | 100% |

**PLANTS OBSERVED:**

| 002 | 004 | Achyranthes aspera |
| 002 | 004 | Aira caryophyllea |
| 002 | 004 | Alopecurus saccatus |
| 002 | 004 | Anthriscus sylvestris |
| 002 | 004 | Avena spp. |
| 002 | 004 | Arum maculatum |
| 002 | 004 | Brassica spp. |
| 002 | 004 | Briza minor |
| 002 | 004 | Brodiaea spp. |
| 002 | 004 | Bromus diandrus |
| 002 | 004 | Bromus hordeaceus |
| 002 | 004 | Cardamine oleracea |
| 002 | 004 | Castilleja aetnata |
| 002 | 004 | Castilleja campestris |
| 002 | 004 | Castilleja exserta |
| 002 | 004 | Centaurea solstitialis |
| 002 | 004 | Centranthus ruber |
| 002 | 004 | Chamomilla recutita |
| 002 | 004 | Cicendia quadrangularis |
| 002 | 004 | Convallaria majalis |
| 002 | 004 | Cota coronopifolia |
| 002 | 004 | Cressula aquatica |
| 002 | 004 | Crypsis sylvatica |
| 002 | 004 | Cuscuta helenium |
| 002 | 004 | Cynodon dactylon |
| 002 | 004 | Echinochloa crus-galli |
| 002 | 004 | Echinobrocha sylvatica |
| 002 | 004 | Eleocharis conspersa |
| 002 | 004 | Elodea canadensis |
| 002 | 004 | Elymus canadensis |
| 002 | 004 | Epipactis palustris |
| 002 | 004 | Eriophorum angustifolium |
| 002 | 004 | Erodium cicutarium |
| 002 | 004 | Eryngium vasesyi |
| 002 | 004 | Eschscholzia californica |
| 002 | 004 | Geranium dissectum |
| 002 | 004 | Geranium molle |
| 002 | 004 | Geranium speciosum |
| 002 | 004 | Glauxleria sylvatica |
| 002 | 004 | Glauchus australis |
| 002 | 004 | Glaucoma aquatica |
| 002 | 004 | Holocarpha virgata |
| 002 | 004 | Hordeum brachyantherum |
| 002 | 004 | Hordeum marinum |
| 002 | 004 | Hypochaeris glabra |
| 002 | 004 | Isoetes howellii |
| 002 | 004 | Isoetes nuttallii |
| 002 | 004 | Isoetes ochroleuca |
| 002 | 004 | Juncus baileyi |
| 002 | 004 | Juncus bufonius |
| 002 | 004 | Juncus capillaris |
| 002 | 004 | Juncus uncials |
| 002 | 004 | Juncus xiphioides |
| 002 | 004 | Juncus spp. |
| 002 | 004 | Lactuca serriola |
| 002 | 004 | Lasthenia greggii |
| 002 | 004 | Lasthenia fremontii |
| 002 | 004 | Lasthenia glabrata |
| 002 | 004 | Layia platyglossa |
| 002 | 004 | Legerecina linaresii |
| 002 | 004 | Lepidium latipes |
| 002 | 004 | Lepidium nudatum |
| 002 | 004 | Leptochloa fascicularis |
| 002 | 004 | Leymus triticeus |
| 002 | 004 | Limnanthes alba |
| 002 | 004 | Limnanthes douglasii |
| 002 | 004 | Limosella aquatica |
| 002 | 004 | Lolium perenne |
| 002 | 004 | Lupinus bicolor |
| 002 | 004 | Lythrum hyssopifolium |
| 002 | 004 | Marsilea vestita |
| 002 | 004 | Medicago polymorpha |
| 002 | 004 | Mentha spp. |
| 002 | 004 | Mirabilis olbiensis |
| 002 | 004 | Miminus gutatus |
| 002 | 004 | Mimus tricolor |
| 002 | 004 | Montia fontana |
| 002 | 004 | Myosurus minimus |
| 002 | 004 | Navarretia intertexta |
| 002 | 004 | Notropis megalops |
| 002 | 004 | Oenothera biennis |
| 002 | 004 | Plagiobothrys greenei |
| 002 | 004 | Plagiobothrys notophyllus |
| 002 | 004 | Plagiobothrys stipatus |
| 002 | 004 | Pflanzago elongata |

**NOTES / COMMENTS:**

About a 10 foot seasonal wetland edge

---

**Modified Braun-Blanquet Cover Scale:**

- 0 = <1%
- 1 = 1 - 5%
- 2 = 6 - 25%
- 3 = 26 - 50%
- 4 = 51 - 75%
- 5 = 76 - 100%
FLORISTIC MONITORING DATA SHEET

<table>
<thead>
<tr>
<th>Date: 4/11/00</th>
<th>Cover ~ Vegetation: 85%</th>
<th>Bare Ground: 15%</th>
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<tr>
<td>Wetland Type: VP</td>
<td>SW W M</td>
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<tr>
<td>Constructed: X</td>
<td>Reference:</td>
<td></td>
</tr>
</tbody>
</table>

**PLANTS OBSERVED:**

- Geranium molle
- Geranium spp.
- Glycera sp.
- Gnaphalium spp.
- Gypsophila chamaegynus
- Helenium fitchii
- Holcus virgaurea
- Hordeum brachyantherum
- Hordeum marinum
- Hordeum murinum
- Hypochaeris glabra
- Isocoma howellii
- Isocoma nuttallii
- Isocoma ocultii
- Juncus bulbus
- Juncus bufonius
- Juncus caputatum
- Juncus unciatus
- Juncus xiphioideus
- Juncus spp.
- Lactuca serriola
- Lasthenia californica
- Lasthenia fremontii
- Lasthenia glabra
- Layia fremontii
- Lagerstroemia ilicifolia
- Leptolium latipes
- Leptolium nitidum
- Leptochloa fascicularis
- Leymus triticoides
- Lilaes scilloides
- Linum alatum
- Linum alatum douglasii
- Limosella acaulis
- Lolium perenne
- Lupinus bicolor
- Lythrum hyssopifolium
- Marsilea vestita
- Medicago polymorpha
- Mentha sp.
- Mimulus guttatus
- Mimulus tricolor
- Montia fontana
- Myosurus minimus
- Navarretia intertexta
- Navarretia leucosclerophora
- Phalaris lemmonii
- Phalaris spp.
- Phyla nodiflora
- Pilocereus chinoides
- Piucaria americana
- Plagiobothrys greenei
- Plagiobothrys nothofolius
- Plantago elongata

- Plantago spp.
- Pos annua
- Pogonomyum douglasii
- Pogonomyum zizyphoides
- Polygonum arenastri
- Polygonum spp.
- Polygona monspeliensis
- Pelorcarpus brevissimus
- Pelorcarpus oregonus
- Pelorcarpus tenellus
- Ranunculus aquatilis
- Ranunculus bulbosus
- Ranunculus muricatus
- Rumex crispus
- Rumex palustris
- Sagittaria montevidensis
- Sanicula vulgaris
- Sidalcea calycoidea
- Sidalcea malvaeflora
- Spergularia rubra
- Stellaria media
- Tamia latifolia
- Trichostema lancerolatum
- Trifolium depauperatum
- Trifolium fluitatum
- Trifolium hirtum
- Trifolium spp.
- Trifolium variegatum
- Triphysaria arianda
- Tripletia hyacinthina
- Typha spp.
- Verbena bonariensis
- Veronica peregrina
- Vicia spp.
- Vulpia bromoides
- Vulpia spp.
- Xanthium strumarium

**NOTES / COMMENTS:**

- Underwater vegetation: Acorus plantago-aquatica
- Tadpole shrimp cross skeleton lots
- No sign of癌症 yet

**Modified Braun-Blanquet Cover Scale:**

- 0 = <1%
- 1 = 1 - 5%
- 2 = 6 - 25%
- 3 = 26 - 50%
- 4 = 51 - 75%
- 5 = 76 - 100%

- *= together: 70 - 100%
June 13, 2000, memorandum from Sandra Starr of ECORP Consulting regarding secondary rare plant survey conducted for Cosumnes River Boulevard project site
Memorandum

Date: June 13, 2000

To: File

From: Sandra Starr

RE: RARE PLANT SURVEY FOR COSUMNES RIVER BLVD.

On June 9, 2000, I conducted a secondary rare plant survey of the proposed Cosumnes River Blvd. project site. The target species of the survey were Sanford’s arrowhead (Sagittaria sanfordii), a federal Species of Concern and California Native Plant Society (CNPS) List 1B species, slender Orcutt grass (Orcuttia tenuis), a federally threatened, California state endangered, and CNPS List 1B plant, and Sacramento Orcutt grass (Orcuttia visceda), a federally endangered, California state endangered, and a CNPS List 1B species. The survey was conducted by walking transects through potential habitat on-site (i.e., seasonal marsh). All other wetland features on-site were too shallow to support any of the above listed species. Plant species and cover values were recorded for the seasonal marsh habitat. Additionally, a cumulative species list was generated for the site while walking transects through the wetlands and intervening upland areas during the April survey. Neither Sanford’s arrowhead, slender Orcutt grass or Sacramento Orcutt grass were found within the subject project site. In addition, Bogg’s Lake hedge-hyssop, dwarf downingia, and Greene’s legenere were not found during the previous field survey.
**PLANTS OBSERVED:**

<table>
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<tr>
<th>Species</th>
<th>Presence</th>
</tr>
</thead>
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<td>Isoetes howelli</td>
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</tr>
<tr>
<td>Juncus balticus</td>
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<tr>
<td>Juncus bufonius</td>
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<tr>
<td>Juncus capitatus</td>
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<tr>
<td>Juncus uncialis</td>
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</tr>
<tr>
<td>Juncus xiphoides</td>
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<td>Juncus spp.</td>
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</tr>
<tr>
<td>Lactuca serriola</td>
<td>Present</td>
</tr>
<tr>
<td>Lasthenia fremontii</td>
<td>Present</td>
</tr>
<tr>
<td>Lasthenia glaberrima</td>
<td>Present</td>
</tr>
<tr>
<td>Layia fremontii</td>
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</tr>
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<td>Senecio vulgaris</td>
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**NOTES / COMMENTS:**

Dry
Results of California Natural Diversity Database records search
Phalarocorax auritus
double-crested cormorant
Element Code: ABNF001020

---List Status---
Federal: None
State: None

---NDDB Element Ranks---
Global: GS
State: S3

---CDFG Status---
SC

---Habitat Association---
General: (ROOKERY SITE) COLONIAL NESTER ON COASTAL CLIFFS, OFFSHORE ISLANDS, & ALONG LAKE MARGINS IN THE INTERIOR OF THE STATE. Micro: NESTS ALONG COAST OR SEQUESTERED ISLETS, USUALLY ON GROUND WITH SLOPING SURFACE, OR IN TALL TREES ALONG LAKE MARGINS.

---Occurrence---
No. 22
Map Index: 11286
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: VERNARD, M. 1988 (CBS)
Quad Summary: FLORIN (3912144/496B)
County Summary: SACRAMENTO
SNH Summary: North Stone Lake
Location: SE ARM OF NORTH STONE LAKE, APPROX 6 MI S OF SACRAMENTO.

---Dates Last Seen---
Element: 1988-XX-XX
Site: 1988-XX-XX
Lat/Long: 38°23'13" / 121°29'27"
UTM: Zone-10 N4249620 E631808
Precision: NON-SPECIFIC
Symbol Type: POINT
Radius: 1/2 mile

---Towship---
Range: 06N
Section: 12 Qtr SW
Meridian: M
Elevation: 5 ft

---Distribution---
6 NESTS WITH APPROXIMATELY 20 ADULT BIRDS IN THE AREA; 2 NESTS CONTAINING YOUNG OBSERVED.

---Ecological---
Habitat consists of a large cottonwood grove surrounded by a freshwater marsh below.

---Threat---
GRAZING IS MAIN THREAT; IT DOES NOT ALLOW REGENERATION OF TREES.

---General---
GREAT BLUE HERON AND GREAT EGRET ALSO NEST HERE. COUNTY OF SACRAMENTO LEASES THIS PROPERTY TO A PRIVATE PARTY.

---Owner/Manager---
SAC COUNTY, PVT

Date: 05/15/2003
Report: RF2WIDE
**Ardea herodias**  
**great blue heron**  
**Element Code:** ABNGA04010

---

**List Status**  
**Federal:** None  
**State:** None

**NDDB Element Ranks**  
**Global:** G5  
**State:** S4

---

**Habitat Associations**

**General:** (ROOKERY) COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.

**Micro:** ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.

---

**Occurrence No. 1**

<table>
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<th>Field</th>
<th>Value</th>
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<tbody>
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<td>11286</td>
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| Dates Last Seen:       | 38°23'13" / 121°29'27"
| Element:               | 1988-05-02                                                           |
| UTM:                   | Zone-10 N4249620 E631808                                            |
| Site:                  | 1988-05-02                                                          |
| Precision:             | NON-SPECIFIC                                                         |
| Symbol Type:           | POINT                                                                |
| Latitude:              | 38°23'13"
| Longitude:             | 121°29'27"                                                          |
| Township:              | 04N                                                                 |
| Range:                 | 04E                                                                  |
| Section:               | 12 OTR SW                                                           |
| Meridian:              | M                                                                    |
| Elevation:             | 5 ft                                                                 |

**Main Source:** MIDDLETON, J. 1988 (OHS)
**Quad Summary:** FLORIN (3812144/496H)
**County Summary:** SACRAMENTO
**SNA Summary:** North Stone Lake
**Location:** North Stone Lake, near JCT SE ARM AND MAIN LAKE BODY, APPROX 6 MI S OF SACRAMENTO.

---

**Distribution:** 16 NESTS WITH ADULTS IN THEM ON 1 FEB 88; 54 NESTS WITH ADULTS COUNTED ON 2 MAY 88.

**Ecological:** HABITAT CONSISTS OF A LARGE COTTONWOOD GROVE SURROUNDED BY FRESHWATER MARSH.

**Threat:** MAIN THREAT IS GRAZING, WHICH DOES NOT ALLOW FOR REGENERATION OF COTTONWOOD TREES.

---

**Date:** 05/15/2003  
**Report:** RP2WIDE  
**Information dated:** 04/09/2003
**Ardea alba**

- **great egret**
- **Element Code:** ABNGA05010

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**Habitat Associations**

- **General:** (ROOKERY) COLONIAL NESTER IN LARGE TREES.
- **Micro:** ROOKERY SITES LOCATED NEAR MARSHES, TIDE-PLATS, IRRIGATED PASTURES, AND MARGINS OF RIVERS AND LAKES.

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<th>Occurrence No. 1</th>
<th>Map Index: 11286</th>
<th>Dates Last Seen: 1988-05-02</th>
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<td>Element: 1988-05-02</td>
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<td>Site: 1988-05-02</td>
<td>Precision: NON-SPECIFIC</td>
<td>Range: 04E</td>
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<tr>
<td>Presence: Presumed Extant</td>
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<td>Radius: 1/4 mile</td>
<td>Section: 12 Qtr SW</td>
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<tr>
<td>Trend: Unknown</td>
<td>Meridian: M</td>
<td>Elevation: 5 ft</td>
<td>Location: 24 ARM OF NORTH STONE LAKE, NEAR JCT OF MAIN BODY OF LAKE, APPROX 6 MI S OF SACRAMENTO.</td>
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</table>

**Distribution:**

- **Ecological:** CATTLE GRAZING ON ALL SIDES OF ROOKERY ELIMINATES REGENERATION OF TREES.
- **General:** ONE GREAT EGRET NEST FOUND ON 1 FEB 88; 11 NESTS COUNTED ON 2 MAY 88. PROPERTY IS OWNED BY SACRAMENTO COUNTY, BUT LEASED TO A PRIVATE PARTY. GREAT BLUE HERONS AND DOUBLE-CRESTED CORMORANTS ALSO NEST HERE.
- **Owner/Manager:** SAC COUNTY, PVT
### Occurrence No. 115

- **Map Index:** 11303
- **Dates Last Seen:** Element: 1981-06-25
- **Lat/Long:** 38°22'01" / 121°28'40"
- **UTM:** Zone-10 N4247419 E632985
- **Precision:** NON-SPECIFIC
- **Symbol Type:** POINT
- **Radius:** 1 mile
- **Township:** 06N
- **Range:** 05E
- **Section:** 18 Qtr SW
- **Meridian:** M
- **Elevation:** 10 ft

**Habitat Associations:**

- **General:** BREDS IN STANDS WITH FEW TREES IN JUNIPER-SAGE FLATS, RIPARIAN AREAS AND IN OAK SAVANNAH.
- **Micro:** REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

**Occurrence Information:**

- **Origin:** Natural/Native occurrence
- **Presence:** Presumed Extant
- **Trend:** Unknown
- **Main Source:** DEPT. OF FISH & GAME 1984 (PERS)
- **Quad Summary:** BRUCEVILLE (3812134/496C)*, FLORIN (3812144/496B)
- **County Summary:** SACRAMENTO
- **SNA Summary:** Location: 6.2 MILES NORTH OF TWIN CITIES ROAD AND WALNUT GROVE EXIT ON HWY 5.

**Comments:**

- **Ecological:**
- **Distribution:**
- **Threat:**
- **General:** DFG SWHA #SA018. 1 ADULT SOARING ABOVE FIELD.

**Owner/Manager:** PVT

### Occurrence No. 179

- **Map Index:** 11308
- **Dates Last Seen:** Element: 1984-05-12
- **Lat/Long:** 38°22'47" / 121°28'35"
- **UTM:** Zone-10 N4248839 E633083
- **Precision:** NON-SPECIFIC
- **Symbol Type:** POINT
- **Radius:** 1 mile
- **Township:** 06N
- **Range:** 05E
- **Section:** 07 Qtr SW
- **Meridian:** M
- **Elevation:** 5 ft

**Habitat Associations:**

- **General:**

**Occurrence Information:**

- **Origin:** Natural/Native occurrence
- **Presence:** Presumed Extant
- **Trend:** Unknown
- **Main Source:** DEPT. OF FISH & GAME 1984 (PERS)
- **Quad Summary:** FLORIN (3812144/496B)*, BRUCEVILLE (3812134/496C)
- **County Summary:** SACRAMENTO
- **SNA Summary:** Location: I-5 APPROX 2 MI N OF HOOD-FRANKLIN RD.

**Comments:**

- **Ecological:**
- **Distribution:**
- **Threat:**
- **General:** DFG SWHA #SA011. ADULTS OBS SOARING OVER AREA IN 1979 AND 1984. NESTS NOT FOUND.

**Owner/Manager:** PVT

### Occurrence No. 187

- **Map Index:** 11229
- **Dates Last Seen:** Element: 1979-07-26
- **Lat/Long:** 38°25'09" / 121°31'03"
- **UTM:** Zone-10 N4253157 E629421
- **Precision:** NON-SPECIFIC
- **Symbol Type:** POINT
- **Radius:** 1 mile
- **Township:** 07N
- **Range:** 04E
- **Section:** 39 Qtr XX
- **Meridian:** M
- **Elevation:** 5 ft

**Habitat Associations:**

- **General:**

**Occurrence Information:**

- **Origin:** Natural/Native occurrence
- **Presence:** Presumed Extant
- **Trend:** Unknown
- **Main Source:** DEPT. OF FISH & GAME 1984 (PERS)
- **Quad Summary:** CLARKSBURG (3812145/497A)*, FLORIN (3812144/496B)
- **County Summary:** SACRAMENTO, YOLO
- **SNA Summary:** Location: NETHERLANDS RD AND SOUTH RIVER RD INTERSECTION.

**Comments:**

- **Ecological:**
- **Distribution:** 1 ADULT OBS ON E SIDE OF RIVER BUT NO NEST FOUND IN 1979.
- **Threat:**
- **General:** DFG SWHA #SA010. NO ADULTS OR NEST FOUND IN 1982.

**Owner/Manager:** PVT
### Buteo swainsonii (cont.)

**Swainson's hawk**  
Element Code: ABNRC19970

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<tr>
<td>Location: EXACTLY 3 MI N OF SCRIBNER RD ON HWY 160, E SIDE SACRAMENTO RIVER.</td>
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<td>Distribution:</td>
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<td>Ecological:</td>
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<tr>
<td>GOOD HABITAT W/LARGE COTTONWOODS IN SWAMPY AREA ON N SIDE OF LEVEE.</td>
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<td>DPFG SWHA #SA023. 2 ADULTS OBS, 1 DARK, 1 MEDIUM PHASE. CARRYING PREY.</td>
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### Occurrence No. 189

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<tr>
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<tr>
<td>Location: SE CORNER OF INTERSECTION ON FRANKLIN BLVD AND SHELTON RD.</td>
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<td>Threat:</td>
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<td>DPFG SWHA #SA005. 1 ADULT OBS IN 1979, NO NEST FOUND. NO ACTIVITY IN 1980 OR 1982.</td>
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### Occurrence No. 312

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<tr>
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</tr>
<tr>
<td>Location: ALONG BIGHORN ROAD, 0.3 MI NORTH OF ELK GROVE BLVD AND 0.5 MI WEST OF HWY 99, 1.5 MI WEST OF ELK GROVE.</td>
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<tr>
<td>Distribution:</td>
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<tr>
<td>BIRDS WERE FIRST OBSERVED USING SNAGS ADJACENT TO BIGHORN ROAD, LATER NESTING IN VALLEY OAKS BEHIND SNAGS.</td>
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<tr>
<td>After young fledged, the birds ranged north over fields near the marsh on Elk Grove Creek.</td>
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<tr>
<td>Ecological:</td>
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</tr>
<tr>
<td>HABITAT SURROUNDING NEST TREE AND NEARBY SNAGS IS OPEN GRASSLAND.</td>
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<td>Threat:</td>
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<tr>
<td>THREATENED BY PROPOSED DEVELOPMENT.</td>
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<tr>
<td>General:</td>
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</tr>
<tr>
<td>THE PAIR OF BIRKS WAS OBSERVED FROM 20 APRIL THROUGH 2 JULY 1990, THROUGH THEIR BREEDING PERIOD. AT LEAST ONE YOUNG FLEDGED, AFTER WHICH THEY MOVED TO SOME TREES ON STOCKTON BLVD, NORTH OF DUNICH ROAD.</td>
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<tr>
<td>Owner/Manager:</td>
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<td>PVT</td>
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Date: 05/15/2003  
Report: RP2WIDE

Information dated 04/09/2003
Buteo swainsoni (cont.)
Swainson's hawk
Element Code: ABRNC19070

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Occurrence No. 395
Occurrence Rank: Excellent
Origin: Natural/Native occurrence
Status: Presumed Extant

Map Index: 21806
Element: 1992-07-16
UTM: Zone-10 N4255793 E631045

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<td>Radius: 80 meters</td>
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Symbol Type: POINT

Distribution: EAST BANK OF SACRAMENTO RIVER, 1 MILE SOUTH OF FREEPORT

Ecological Threat: Possible threat from increased foot traffic/human disturbance if proposed nature center is built.

General: DFG EWA #9A044. 1 ADULT/1 JUVENILE OBSERVED ON NEST ON 16 JUL 1992; 2 ADULTS PRESENT ON 20 JUL 1992.

Owner/Manager: BVT-BEACH LAKE PROPERTIES

Occurrence No. 913
Occurrence Rank: Good
Origin: Natural/Native occurrence
Status: Presumed Extant

Map Index: 45481
Element: 2001-06-02
UTM: Zone-10 N4255479 E640547

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<td>Site: 2001-06-02</td>
<td>Radius: 80 meters</td>
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Symbol Type: POINT

Distribution: NORTH SIDE OF SHELDON ROAD, 0.5 MILE EAST OF HIGHWAY 99, BETWEEN ELK GROVE AND SACRAMENTO

Ecological Threat: NEST TREE IS A EUCALYPTUS; SURROUNDED BY ANNUAL GRASSLAND, HAY PRODUCTION, AND URBAN DEVELOPMENT.


Owner/Manager: PVT

Date: 05/15/2003
Report: RP2 Wide
Athena cunicularia
burrowing owl
Element Code: ABNS10010

Habitat Associations:
General: (BURROW SITES) OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION. Micro: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.

Occurrence No. 128
Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Main Source: KOFORD, E. 1992 (OBS)
Quad Summary: FLORIN (381214/4496B)
County Summary: SACRAMENTO
SNA Summary: Location: EAST SIDE OF SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, BETWEEN HWY 99 AND I-5, 5 MI NORTH OF FRANKLIN.

Distribution: BURROWS A, B, C, D, AND L ARE LOCATED WEST OF THE UNION PACIFIC RAILROAD TRACKS. BURROWS (ARTIFICIAL, INACTIVE) C, H, I, J AND K ARE LOCATED EAST OF RAILROAD TRACKS. BURROW F (INACTIVE) & E (ELIMINATED) ARE 1200FT & 1600FT NW OF BURROW B
Ecological: HABITAT ADJACENT TO BURROW SITE IS GRASSLAND. SURROUNDING AREA TO WEST CONSISTS OF A WASTEWATER TREATMENT PLANT.
Threat:

Owner/Manager: SAC COUNTY

Occurrence No. 210
Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Main Source: GUSE, K. 1994 (OBS)
Quad Summary: FLORIN (381214/496B)
County Summary: SACRAMENTO
SNA Summary: Location: COSUMNES RIVER COLLEGE PLAYING FIELD, SACRAMENTO

Distribution: BURROWS ARE LOCATED ON THE BEMAS SURROUNDING THE TRACK AND FOOTBALL FIELD.
Ecological: HABITAT SURROUNDING THE BURROWS CONSISTS OF INTRODUCED, ANNUAL GRASSLAND.
Threat:
General: 12 OCCUPIED BURROWS OBSERVED IN 1994. WITH A TOTAL OF AT LEAST 18 ADULTS (6-12 PAIRS ESTIMATED). 2 ADULTS OBSERVED PERCHED "0.2 MILE EAST OF THIS SITE ON 25 MAR 2002.

Owner/Manager: COSUMNES RIVER COLLEGE

Occurrence No. 229
Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Main Source: NOSAL, T. & J. NOSAL 1995 (OBS)
Quad Summary: FLORIN (381214/496B)
County Summary: SACRAMENTO
SNA Summary: Location: SOUTH SIDE OF ELDER CREEK, JUST WEST OF FRANKLIN BLVD, SACRAMENTO.

Distribution: OWLS OBSERVED ON THE TOP OF A FREQUENTLY-USED LEVEE.
Ecological: HABITAT CONSISTS OF MAN-MADE LEVEE; ASSOCIATED VEGETATION IS VERY WEEDY (ANNUAL GRASSES, POLYGONUM, BRASSICA, ETC). SURROUNDING: VACANT FLOWED FIELDS NORTH & SOUTH OF LEVEE, PENDING DEVELOPMENT IN LOT TO THE SOUTH, REMAINDER DEVELOPED.
Threat:

Owner/Manager: SAC COUNTY

Date: 05/15/2003
Report: R2SWIDE
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<td>Lat/Long: 38°28'50&quot; / 121°27'08&quot;</td>
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<td>UTM: Zone-10 N4260073 E635005</td>
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**Occurrence No. 551**

| Date Last Seen:   | Lat/Long: 38°27'26" / 121°24'18" |
|-------------------| UTM: Zone-10 N4257562 E639167 |
| Element: 2002-06-10| Precision: SPECIFIC |
| Site: 2002-06-10   | Symbol Type: POINT |
| Township: 07N      | Radius: 80 meters |
| Range: 05E         | Meridian: M |
| Section: 14 Qtr XX | Elevation: 20 ft |

**Distribution:**

- **Ecological:** HABITAT CONSISTS OF A SMALL LEVEE FOR ELDER CREEK.
- **Threat:** THREATENED BY DEVELOPMENT OF FORAGING HABITAT AND NOISE/DISTURBANCE.
- **General:** 1 ADULT OBSERVED AT THE BURROW SITE.
- **Owner/Manager:** SAC COUNTY

**Distribution:**

- **Ecological:** A WELL-KNOWN COLONY OF BROWN EXISTS ABOUT A MILE FROM THIS SITE, AT COSUMNES RIVER COLLEGE.
- **Threat:** THREATENED BY DEVELOPMENT.
- **General:** 4 ADULTS OBSERVED AT THIS ACTIVE BURROW SITE ON 10 JUN 2002.
- **Owner/Manager:** UNKNOWN
Agelaius tricolor
tricolored blackbird
Element Code: APBXX80020

---List Status---
Federal: Species of Concern
State: None

---NDDB Element Ranks---
Global: G2
State: S2

---Other Lists---
CDFG Status: SC

Habitat Associations
General: (NESTING COLONY) HIGHLY COLONIAL SPECIES. MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA. Micro: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

* SENSITIVE *
Occurrence No. 6
Map Index: ---Dates Last Seen--- Lat/Long: /
Occ: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Fluctuating
Main Source: HOSEA, R. 1986 (LIT)
Quad Summary: FLORIN (3812144/4968)*, ELK GROVE (3812143/496A)
County Summary: SACRAMENTO
SNA Summary: Location: *SENSITIVE* Location information suppressed.
Comments:
Distribution: Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information: (916) 324-3812.
Ecological: NESTING SUBSTRATE CONSISTS OF BLACKBERRIES, ADJACENT TO GRASSLAND.
Threat: THREATENED BY ENCRASHING DEVELOPMENT. REALIGNMENT OF STRAWBERRY CREEK DAMAGED THIS SITE.
General:
Owner/Manager:

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* SENSITIVE *
Occurrence No. 7
Map Index: ---Dates Last Seen--- Lat/Long: /
Occ: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: HOSEA, R. 1986 (LIT)
Quad Summary: FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary: Location: *SENSITIVE* Location information suppressed.
Comments:
Distribution: Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information: (916) 324-3812.
Ecological:
Threat:
General:
Owner/Manager:

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* SENSITIVE *
Occurrence No. 9
Map Index: ---Dates Last Seen--- Lat/Long: /
Occ: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: HOSEA, R. 1986 (LIT)
Quad Summary: BRUCEVILLE (3812134/496C)*, FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary: Location: *SENSITIVE* Location information suppressed.
Comments:
Distribution: Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information: (916) 324-3812.
Ecological:
Threat:
General:
Owner/Manager:
Agelaius tricolor (cont.)
tricolored blackbird

* SENSITIVE *

Occurrence No. 19
Occ Rank: None
Origin: Natural/Native occurrence
Presence: Possibly Extirpated
Trend: Unknown
Main Source: NOREA, R. 1986 [LIT]
Quad Summary: FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary: Location: *SENSITIVE* Location information suppressed.

Distribution: Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information: (916) 324-3812.
Ecological: NESTING SUBSTRATE CONSISTS OF NYPHA.
Threat: General:
Owner/Manager:

* SENSITIVE *

Occurrence No. 156
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: DESHAVEN, R. (OBS)
Quad Summary: ELK GROVE (3812143/496A)*, GALT (3812133/496D), BRUCEVILLE (3812134/496C), FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary: Location: *SENSITIVE* Location information suppressed.

Comments:

Distribution: Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information: (916) 324-3812.
Ecological: NESTING SUBSTRATE CONSISTS OF CATTAILS AND BULrush.
Threat: General:
Owner/Manager:

* SENSITIVE *

Occurrence No. 159
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: DESHAVEN, R. (OBS)
Quad Summary: FLORIN (3812144/496B)*, BRUCEVILLE (3812134/496C)
County Summary: SACRAMENTO
SNA Summary: Location: *SENSITIVE* Location information suppressed.

Comments:

Distribution: Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information: (916) 324-3812.
Ecological: NESTING IN CATTAILS AND BULrush.
Threat: General:
Owner/Manager:
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<th><strong>Agelaius tricolor (cont.)</strong></th>
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<td>Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information: (916) 324-3812.</td>
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<td>NESTING SUBSTRATE CONSISTS OF HIMALAYA BERRY BRAMBL ES ON THE SOUTH BANK OF STRAWBERRY CREEK.</td>
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</tbody>
</table>
### Habitat Associations

**General:** ENDEMIC TO THE LAKES AND RIVERS OF THE CENTRAL VALLEY, BUT NOW CONFINED TO THE DELTA, SUISUN BAY & ASSOCIATED MARSHES. MICRO: SLOW MOVING RIVER SECTIONS, DEAD END SLOPES. REQUIRE FLOODED VEGETATION FOR SPANNING & FORAGING FOR YOUNG.

**Occurrence No. 1**  
Map Index: 24986  
---Dates Last Seen---  
Occ Rank: Good  
Lat/Long: 38°36'49" / 121°33'35"  
Origin: Natural/Native occurrence  
Site: 1995-02-26  
Presence: Presumed Extant  
Trend: Unknown  
Main Source: WIXON, L. ET AL 1995 (LIT)  
Quad Summary: TAYLOR MONUMENT (3812165/513A)*, COURTLAND (3812135/497D), FLORIN (3812144/496B), CLARKSBURG (3812145/497A), SACRAMENTO WEST (3812155/513D), GRAYS BEND (3812166/513B), VERONA (3812175/529D), KNIGHTS LANDING (3812176/529C), ELDORADO BEND (3812177/530D), NICOLAUS (3812185/529A)  
County Summary: SACRAMENTO, SUTTER, YOLO  
Location: SACRAMENTO RIVER FROM MISSOURI BEND N OF KNIGHTS LANDING TO S OF COURTLAND. ALSO, LOWER 10 MILES OF THE FEATHER RIVER.  

**Distribution:** IN THE SACRAMENTO RIVER FROM RIVER MILE 33 SOUTH OF COURTLAND TO RIVER MILE 97 NORTH OF KNIGHTS LANDING, AND THE LOWER 10 MILES OF THE FEATHER RIVER.  

**Ecological:** MODERATE CURRENT & SANDY BOTTOM. RIVERBEDS VARIABLE, WATER TEMP AVERAGES LOW 60'S F. MOST FISH TAKEN FROM THE END OF DECEMBER TO THE END OF MAY.  

**Threat:** INFORMATION TAKEN FROM A SACRAMENTO RIVER ANGLER SURVEY CONDUCTED BETWEEN 1991 & 1995. FISH WERE TAKEN BY HOOK & LINE MOSTLY FROM SHORE. MOST OF THE SPLITTAIL CAUGHT WERE TAKEN INCIDENTALLY & WERE NOT THE SPECIES TARGETED BY THE ANGLER.

**Owner/Manager:** PVT, STATE
### Habitat Associations

**General:** ASSOCIATED WITH PERMANENT OR NEARLY PERMANENT WATER IN A WIDE VARIETY OF HABITATS.

**Micro:** REQUIRES BASKING SITES. NEST SITES MAY BE FOUND UP TO 0.5 KM FROM WATER.

### Occurrence No. 48

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<th>Map Index: 32826</th>
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<td>Trend: Unknown</td>
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<tr>
<td>Main Source: HOLLAND, D. 1988 (PERS)</td>
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<td>Quad Summary: FLORIN (3812144/496B)*, CLARKSBURG (3812145/497A)</td>
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<tr>
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<tr>
<td>SNA Summary: Location: STONE LAKE PRESERVE; APPROX. 1.0 MILE NORTHEAST OF HOOPLA.</td>
</tr>
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<td>---Dates Last Seen---</td>
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<td>Symbol Type: POINT</td>
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<td>Township: 06N</td>
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<td>Section: XX Qtr XX</td>
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<td>Meridian: M</td>
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<td>Elevation: 10 ft</td>
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**Distribution:**
- Ecological: 
- Threat: 

**General:** COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.

**Owner/Manager:** UNKNOWN

### Occurrence No. 49

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<td>Presence: Presumed Extant</td>
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<tr>
<td>Trend: Unknown</td>
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<td>Main Source: HOLLAND, D. 1988 (PERS)</td>
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<tr>
<td>County Summary: SACRAMENTO</td>
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<tr>
<td>SNA Summary: Location: BEACH LAKE PRESERVE; APPROX. 1.5 MILES SOUTH OF FRESNOPORT.</td>
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<td>---Dates Last Seen---</td>
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<td>Symbol Type: POLYGON</td>
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<tr>
<td>Area: 61.0 ac</td>
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<td>Township: 07N</td>
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<td>Range: 04E</td>
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<td>Section: XX Qtr XX</td>
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<td>Meridian: M</td>
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<td>Elevation: 10 ft</td>
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</tbody>
</table>

**Distribution:**
- Ecological: 
- Threat: 

**General:** COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.

**Owner/Manager:** SAC COUNTY, PVT

### Occurrence No. 50

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<td>Trend: Unknown</td>
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<td>Main Source: HOLLAND, D. 1988 (PERS)</td>
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<td>County Summary: SACRAMENTO</td>
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<tr>
<td>SNA Summary: Location: NORTH OF FRANKLIN; DITCH EAST OF FRANKLIN BLVD X WESTERN PACIFIC RR.</td>
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<tr>
<td>---Dates Last Seen---</td>
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<td>Section: 08 Qtr NE</td>
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<td>Meridian: M</td>
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<td>Elevation: 20 ft</td>
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**Distribution:**
- Ecological: 
- Threat: 

**General:** COLLECTED BY DFG, DATE AND NUMBER OF SPECIMENS UNKNOWN.

**Owner/Manager:** UNKNOWN
**Thamnophis gigas**

giant garter snake

**Element Code:** ARADB36150

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<th>List Status</th>
<th>NDDB Element Ranks</th>
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<tr>
<td>Federal: Threatened</td>
<td>Global: G2G3</td>
<td>State: $2S3</td>
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</table>

**Habitat Associations**

General: **PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.**

Micro: **THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.**

**Occurrence No. 13**

| Map Index: 11466 | Dates Last Seen: 1982-07-26 | Lat/Long: 38°24'45" / 121°23'40"
|------------------|-----------------------------|-----------------|
| Occ Rank: None | Township: 07N | Range: 05E
| Origin: Natural/Native occurrence | Site: 1987-XX-XX | Section: 35 Qtr S
| Presence: Extirpated | Lat/Lon: Zone-10 N4252598 E640170 | Meridian: M
| Trend: Unknown | Symbol Type: POINT | Elevation: 45 ft
| Main Source: HANSEN, G. 1982 (LIT) | Radius: 1 mile |
| Quad Summary: FLORIN (3812144/4968) | County Summary: SACRAMENTO |
| SNA Summary: ELK GROVE CREEK, 0.4 MI W HWY 99 AND 0.5 MI N ELK GROVE BLVD. ELK GROVE. |

**Comments**

**Ecological:**

**Distribution:**

The marsh at this location was filled and leveled for industrial park development as of May 1984.

**Threat:**

General: **MAY 1929: ADULT COLLECTED 10 MILES S OF SACRAMENTO. 7/1/76: 1 SNAKE CAPTURED & RELEASED. 7/26/82: 2 JUVENILES CAPTURED (EXAMINED & RELEASED) WHILE BASKING ON MATS OF DRY CATTAILS NEAR SHORE. NO SNAKES OBS DURING 1986-87 STUDY BY G. HANSEN.**

**Owner/Manager:** PVT

---

**Occurrence No. 14**

| Map Index: 11413 | Dates Last Seen: 1976-08-03 | Lat/Long: 38°26'13" / 121°25'19"
|------------------|-----------------------------|-----------------|
| Occ Rank: Unknown | Township: 07N | Range: 05E
| Origin: Natural/Native occurrence | Site: 1987-XX-XX | Section: 27 Qtr NW
| Presence: Presumed Extant | Lat/Lon: Zone-10 N4255276 E637725 | Meridian: M
| Trend: Unknown | Symbol Type: POINT | Elevation: 20 ft
| Main Source: HANSEN, G. 1982 (LIT) | Radius: 1/5 mile |
| Quad Summary: FLORIN (3812144/4968) | County Summary: SACRAMENTO |
| SNA Summary: Lower Laguna Creek | Location: LAGUNA MARSH, ALONG SHELDON RD, 0.3 MI W OF BRUCEVILLE RD, ELK GROVE. |

**Comments**

**Ecological:**

**Distribution:**

Marsh area surrounded by cultivated fields and heavily grazed grasslands. Grazed areas characterized by compacted soil, few rodent burrows, & sparse vegetation, thereby providing little cover for snakes during floods.

**Threat:**

Agriculture and Grazing.

**General:**

Snakes observed prior to, but not during 1986-87 study by G. HANSEN.

**Owner/Manager:** PVT

---

**Occurrence No. 15**

| Map Index: 11275 | Dates Last Seen: 1992-07-19 | Lat/Long: 38°25'57" / 121°29'50"
|------------------|-----------------------------|-----------------|
| Occ Rank: Unknown | Township: 07N | Range: 04E
| Origin: Natural/Native occurrence | Site: 1992-07-19 | Section: XX Qtr XX
| Presence: Presumed Extant | Lat/Lon: Zone-10 N4254659 E631177 | Meridian: M
| Trend: Unknown | Symbol Type: POLYGON | Elevation: 10 ft
| Main Source: HANSEN, G. 1980 (LIT) | Area: 61.0 ac |
| Quad Summary: FLORIN (3812144/4968) | County Summary: SACRAMENTO |
| SNA Summary: | Location: BEACH LAKE, APPROXIMATELY 1.5 MILES SOUTH OF FREEPORT. |

**Comments**

**Ecological:**

1992 Observation made along the eastern face of the lever between Morrison Creek and the lake. Shore vegetation dominated by SCIRUS ACUTA.

**Site Was Sprayed by Herbicides in 1991.**

General: **ONE ADULT OBSERVED EATING A BULLFROG. LEVER SERVES AS ACCESS TO AGRICULTURAL FIELD (SITE OF PROPOSED CALTRANS MITIGATION BANK) TO EAST. LIGHT FISHING AND RECREATION USE FROM BEACH LAKE PROPERTIES (ELP) MEMBERS.**

**Owner/Manager:** SAC COUNTY, PVT
<table>
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<th>Occurrence No.</th>
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<th>Section: 26 Qtr NW</th>
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<td>Main Source: HANSEN, G. 1982 (LIT)</td>
<td>County Summary: SACRAMENTO</td>
<td>SNA Summary: Lower Laguna Creek</td>
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<td></td>
<td>Quad Summary: FLOREN (3812144/4968)</td>
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</table>

**Distribution:**

ADULT SNAKE FOUND SWIMMING AMONG CATTAILS & TULES; AREA ALSO KNOWN AS "CONFLUENCE MARSH" (JCT OF LAGUNA CR & ELK GROVE CR). POTENTIAL PREY SPECIES INCLUDE CARP, BULLHEAD, MOSQUITOFISH, & BULLFROG.

**Trend:** MARSH AREA SURROUNDED BY IRRIGATED PASTURE & GRAZED GRASSLAND.

**Ecological:** SNAKE OBSERVED PRIOR TO, BUT NOT DURING 1986-87 STUDY BY G. HANSEN.

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<table>
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<th>Occurrence No.</th>
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<th>Range: 04E</th>
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<td></td>
<td>Quad Summary: FLOREN (3812144/4968)</td>
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</table>

**Comments:**

SNAKES WERE FOUND IN OLD "PIT" BLINDS AT A SMALL DUCK CLUB.

**Ecological:** AT THE TIME OF THE ORIGINAL OBSERVATIONS (1955 AND 1965), THIS AREA CONSISTED OF FARMLAND (WHEAT, CORN) ADJACENT TO MORRISON CREEK RIPARIAN/FLOODPLAIN. SITE IS NOW MANAGED AS SANITATION DISTRICT BUFFER LANDS (MANAGED MARSH).

**Threat:** POSSIBLE THREATS INCLUDE FLOODING, CONVERSION TO OTHER WETLAND TYPES, AND UPSTREAM URBANIZATION.

**General:** 1 GSS OBSERVED IN 1955; 2 OBSERVED IN 1965. GSS IS PRESUMED TO BE EXTANT AT THIS SITE DUE TO THE PERSISTENCE OF SUITABLE WETLANDS AT THIS SITE AND OBSERVATIONS OF GSS FROM NEARBY UPSTREAM AND DOWNSTREAM LOCATIONS.

**Owner/Manager:** SANITATION DIST
## Northern Hardpan Vernal Pool

**Element Code:** CTT44110CA

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### Habitat Associations

- General: None for this Element
- Micro: None for this Element

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<td>SNA Summary: Lower Laguna Creek</td>
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<tr>
<td>Location: N OF SIMS RD, W OF FRANKLIN RD. (SACRAMENTO VIC).</td>
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**Comments:** minimal information available.

- Ecological: FRESHWATER MASH AREAS PRESENT. APPROX 200 ACRES.
- Threat: LOW FLOOD PLAIN POOLS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
- General: UNKNOWN

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<tr>
<td>Location: S OF SHELDON RD AND W OF HWY 99. (SACRAMENTO VIC).</td>
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**Comments:** minimal information available.

- Ecological: APPROX 200 ACRES.
- Threat: LOW FLOODPLAIN POOLS W/ FRESHWATER MASH AREAS. ON SAN JOAQUIN ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
- General: UNKNOWN

---

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<td>Location: 10 MI S OF SACTO. FRANKLIN BLVD, NW OF FRANKLIN AREA INCLS 6 1/2 SECTS.</td>
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**Distribution:** minimal information available.

- Ecological: LARGE, SHALLOW, FLOODPLAIN VERNAL POOLS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
- Threat: HEAVY CATTLE USE.
- General: UNKNOWN

---

Date: 05/15/2003
Report: RP2MIDE
Commercial Version
Information dated 04/09/2003
### Northern Hardpan Vernal Pool (cont.)

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<th>County Summary</th>
<th>SNA Summary</th>
<th>Location</th>
<th>Distribution</th>
<th>Ecological</th>
<th>Threat</th>
<th>General</th>
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<td>ELLIOT RANCH ROAD, WEST OF FRANKLIN BLVD.</td>
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<td>WEST OF FRANKLIN BLVD ABOUT 1.3 MI S OF FRANKLIN.</td>
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<td>SPARSE VERNAL POOLS AS SEEN IN 1983 AERIAL PHOTOS.</td>
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**Occurrence No. 91**
- **Map Index:** 11328
- **Occurrence Rank:** Unknown
- **Origin:** Natural/Native occurrence
- **Presence:** Presumed Extant
- **Main Source:** HOLLAND, R. & V. DAINS 1986 (MAP)
- **Quad Summary:** FLORIN (3812144/496B)
- **County Summary:** SACRAMENTO
- **Location:** ELLIOT RANCH ROAD, WEST OF FRANKLIN BLVD.
- **Distribution:** SPARSELY DISTRIBUTED.
- **Ecological:** ON SAN JOAQUIN-ALAMO ASSOC SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
- **Owner/Manager:** UNKNOWN

**Occurrence No. 94**
- **Map Index:** 11340
- **Occurrence Rank:** Unknown
- **Origin:** Natural/Native occurrence
- **Presence:** Presumed Extant
- **Main Source:** HOLLAND, R. & V. DAINS 1986 (MAP)
- **Quad Summary:** BRUCEVILLE (3812134/496C)*, FLORIN (3812144/496B)
- **County Summary:** SACRAMENTO
- **Location:** WEST OF FRANKLIN BLVD ABOUT 1.3 MI S OF FRANKLIN.
- **Distribution:** SPARSE DISTRIBUTION.
- **Ecological:** ON SAN JOAQUIN-ALAMO ASSOC SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
- **Owner/Manager:** UNKNOWN

**Occurrence No. 97**
- **Map Index:** 11412
- **Occurrence Rank:** Unknown
- **Origin:** Natural/Native occurrence
- **Presence:** Presumed Extant
- **Main Source:** HOLLAND, R. & V. DAINS 1986 (MAP)
- **Quad Summary:** FLORIN (3812144/496B)
- **County Summary:** SACRAMENTO
- **Location:** JUST N OF SHELDON RD, W OF BRUCEVILLE RD. S OF COSUMNES RIV COLLEGE.
- **Distribution:** SPARSE VERNAL POOLS AS SEEN IN 1983 AERIAL PHOTOS.
- **Ecological:** ON SAN JOAQUIN ASSOCIATION SOILS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
- **Owner/Manager:** UNKNOWN

---

**Date:** 05/15/2003  **Commercial Version**  **Page 17**
**Report:** RP2WIDE  **Information dated 04/09/2003**
Branchinecta lynchi
vernals pool fairy shrimp
Element Code: ICBA03030

--- List Status ---
Federal: Threatened
State: None

--- NDDB Element Ranks ---
Global: G2G3
State: S2B3

--- Habitat Association ---
General: ENDEM TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ARTIFICIAL RAIN-FILLED POOLS. Micro: INHABITS SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SNAKE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.

--- Occurrence No. 123 ---
Map Index: 24533
Occurrence No.: 123
Occurrence Map: 24533
Occurrence Date: 1993-02-23
Occurrence Latitude: 38°26'56" / 121°27'29"
Occurrence Longitude: UTM Zone 10: N4256545 E634544

--- Distribution ---
Distribution: HABITAT CONSISTS OF WATER FILLED DEPRESSIONS WITH RR ROW, SLIGHTLY TURBID WATER; DOMINANT PLANTS: JUNCUS BUFONIS, PLAXICHTHYRIS STIPITATUS VAR. MICRANTHUS, GRATAEA SPP., LYMNON HYSSOPÓLIA.

--- Owner/Manager ---
Owner/Manager: PVT-WESTERN PACIFIC RR

--- Occurrence No. 138 ---
Map Index: 34812
Occurrence No.: 138
Occurrence Map: 34812
Occurrence Date: 1993-01-14
Occurrence Latitude: 38°23'44" / 121°27'55"
Occurrence Longitude: UTM Zone 10: N4250624 E634031

--- Distribution ---

--- Owner/Manager ---
Owner/Manager: PVT-GROSE DEVELOPMENT CO

--- Occurrence No. 161 ---
Map Index: 33682
Occurrence No.: 161
Occurrence Map: 33682
Occurrence Date: 1993-02-04
Occurrence Latitude: 38°25'24" / 121°27'13"
Occurrence Longitude: UTM Zone 10: N4253720 E634993

--- Distribution ---
Distribution: POOLS LOCATED SOMEWHERE IN SECTIONS 29 & 32.

--- Owner/Manager ---
Owner/Manager: UNKNOWN

--- Comments ---
Comments: ""
Branchiostoma lynchii (cont.)
vernal pool face amph.
Element Code: ICBRA03030

---List Status---
Federal: Threatened
Global: G2G3
State: S2S3

---NDDB Element Ranks---
---CDPG Status---

Occurrence No. 166
Map Index: 33692
Occ Rank: Unknown
Origin: Vernal pool
Presence: Presumed Extant
Main Source: SUGNET & ASSOC. 1993 (PERS)
Quad Summary: SACRAMENTO EAST (3812144/812C)*, FLORIN (3812144/496B)
Location:
SOUTH OF FRUIT RIDGE RD, NORTH OF FLORIN RD, EAST OF POWER INN RD, & WEST OF FLORIN PERKINS RD.

Distribution:
ROADSIDE DITCHES LOCATED SOMEWHERE IN SECTIONS 26 AND 35.
Ecological:
MOST OF SECTION 26 IS URBANIZED.

Owner/Manager: UNKNOWN

Occurrence No. 187
Map Index: 36815
Occ Rank: Unknown
Origin: Vernal pool
Presence: Presumed Extant
Main Source: BELK, D. 1994 (PERS)
Quad Summary: FLORIN (3812144/496B)
Location:
SOUTH OF ELLIOTT RANCH ROAD, JUST EAST OF 1-5, 4 MILES SOUTH OF SACRAMENTO.

Distribution:
THREE COLLECTIONS MADE IN THE SW QUARTER AND ONE COLLECTION MADE IN THE SE Quarter of Section 31.
Ecological:

General:
AN UNKNOWN NUMBER WERE COLLECTED BY DAVID MUTH; SENT TO DENTON BELK FOR IDENTIFICATION (DB#1019, 1021, 1022, 1021).

Owner/Manager: UNKNOWN

Occurrence No. 312
Map Index: 46122
Occ Rank: Unknown
Origin: Vernal pool
Presence: Presumed Extant
Main Source: RAMONES, S. 2001 (OBS)
Quad Summary: FLORIN (3812144/496B)
Location:
NW ELK GROVE. 0.75 MILES EAST INTERSECT OF STATE RTE 99 & SHELDON RD, APPROX 1.5 MILES SOUTH ALONG UNIMPROVED RD.

Distribution:
EAST SIDE OF ROAD, VERNAL POOL 10.
Ecological:
HABITAT CONSISTS OF DISKED FIELDS INTERSPERSED WITH VERNAL POOL AND SEASONAL WETLANDS. PLANT SPECIES INCLUDE: WILD OATS, RIP-OUT, BROME, SOFT EROME AND VETCH. CARTER'S BUTTERCUP, WINGED WATER-STARCH, SLENDER POPCORN FLOWER ON IN POOLS.
Threat:
THREATENED BY DEVELOPMENT (SHELDON ESTATES PROJECT).

Owner/Manager: PVT

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<table>
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<tr>
<th>Branchiostoma mesovallensis</th>
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<tr>
<td>sidvalley fairy shrimp</td>
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<td>Global: G2</td>
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--- Habitat Associations ---
General: VERNAL POOLS IN THE CENTRAL VALLEY
Micro: None for this Element

--- Occurrence No. 18 ---
Map Index: 46082
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: RAMONES, S. 2001 (OBS)
Quad Summary: FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary: Location: BETWEEN LAGUNA CREEK AND SHELDON ROAD, 0.6 MILES EAST OF HIGHWAY 99

--- Occurrence No. 26 ---
Map Index: 48247
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: BELK, D. & M. FUGATE 2000 (LIT)
Quad Summary: FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary: Location: POOL BESIDE I-5. 1.25 MILES NNNW OF FRANKLIN.

--- Occurrence No. 27 ---
Map Index: 48248
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: BELK, D. & M. FUGATE 2000 (LIT)
Quad Summary: FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary: Location: SOUTH OF ELLIOT RANCH ROAD & EAST OF I-5. 4 MILES SOUTH OF SACRAMENTO.

--- Distribution ---
Ecological: VERNAL POOL
General: DENTON BELK COLLECTION #1018 COLLECTED 13 MAR 1991 BY DAVID MUTH.
Owner/Manager: UNKNOWN

--- Distribution ---
Ecological: VERNAL POOL
General: DENTON BELK COLLECTION #1021 COLLECTED 13 MAR 1991 BY DAVID MUTH.
Owner/Manager: UNKNOWN
Branchinecta mesovallensis (cont.)

midvalley fairy shrimp
Element Code: ICBA03150

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Occurrence No. 39
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: ROGERS, D. 2001 (MAP)
County Summary: SACRAMENTO
SNA Summary: SACRAMENTO
Location: 4.5 MILES WEST OF ELK GROVE; 200FT NORTH OF ELK GROVE BLVD, 0.2 MILE EAST OF FRANKLIN BLVD.
Comments:
Distribution: Unknown
Ecological: Terra
General: UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #004. DATE OF COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.
Owner/Manager: Unknown

Occurrence No. 40
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: ROGERS, D. 2001 (MAP)
County Summary: SACRAMENTO
SNA Summary: SACRAMENTO
Location: 5.2 MILES WEST OF ELK GROVE; 200 FT NORTH OF ELK GROVE BLVD, 0.45 MILE WEST OF FRANKLIN BLVD.
Comments:
Distribution: Unknown
Ecological: Threat
General: UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #015. DATE OF COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.
Owner/Manager: Unknown

Occurrence No. 41
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: ROGERS, D. 2001 (MAP)
County Summary: SACRAMENTO
SNA Summary: SACRAMENTO
Location: 4.5 MILES WEST OF ELK GROVE; 1.1 MILES NORTH OF ELK GROVE BLVD ALONG FRANKLIN BLVD AND 400 FT TO THE EAST.
Comments:
Distribution: Unknown
Ecological: Threat
General: UNKNOWN NUMBER OF INDIVIDUALS OBSERVED/COLLECTED AT SITE #005. DATE OF COLLECTION UNKNOWN. LOCATION INFORMATION OBTAINED FROM VARIOUS SOURCES.
Owner/Manager: Unknown

---

Date: 05/15/2003
Report: R2F2WIDE

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<table>
<thead>
<tr>
<th>Linderiella occidentalis</th>
</tr>
</thead>
</table>

**California linderiella**

**Element Code:** ICCHA06010

---

**Habitat Association**

General: *SEASONAL POOLS IN UNEFLOODED GRASSLANDS WITH OLD ALLUVIAL SOILS UNDERLAIN BY HARDPAN OR IN SANDSTONE DEPRESSIONS.
Micro: WATER IN THE POOLS HAS VERY LOW ALKALINITY, CONDUCTIVITY, AND TDS.*

---

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<td>Zone-10 N4256545 E634544</td>
<td>E OF SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT, ON BOTH SIDES OF WP RR TRACKS; 1.2 RM N OF RR CROSSING ON SIMS ROAD</td>
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| Distribution: | POUND ALONG THE WEST AND EAST SIDES OF THE WESTERN PACIFIC RR TRACKS. |

Ecological: *HABITAT CONSISTS OF WATER-FILLED DEPRESSIONS WITHIN RR ROW; SLIGHTLY TURBID WATER; DOMINANT PLANTS: JUNCUS BUFONIUS, PLAGIOBOTHYS STIPITATUS VAR. MIRANTRUS, GRATYOLA EBRACTEATA, LITHUM HESOPHIFOLIA.*

---

| Threat: | MOSQUITO ABASTEMENT/VISITATION CONTROL ACTIVITIES; VEHICLE ENCROACHMENT FOR RR MAINTENANCE; WATER TREATMENT ACTIVITIES. |

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---

| Owner/Manager: | PVTS-WESTERN PACIFIC RR |

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<td>38°29'15&quot; / 121°28'11&quot;</td>
<td>Zone-10 N4261743 E633446</td>
<td>CORNER OF FLORIN ROAD AND UNION PACIFIC (WESTERN PACIFIC) RR, WEST OF HWY 99</td>
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---

| Distribution: | LINDERIELLA OBSERVED BY KOFORD DURING SURVEY IN SPRING OF 1992; LEPIDURUS PACKARDI ALSO PRESENT. |

---

| Owner/Manager: | PVTS-UNION PACIFIC RR |

---

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<td>2.1 KM NW OF FRANKLIN; WEST OF WESTERN PACIFIC RR, EAST OF I-5, SOUTH OF ELK GROVE BLVD</td>
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Ecological: *NATURAL & CONSTRUCTED HARDPAN VERNAL POOLS, SEASONAL MARSHES & WETLANDS WITHIN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.*

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<p>| Owner/Manager: | PVTS-GROUPE DEVELOPMENT CO |</p>
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<tr>
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<td>Location: INTERSECTION OF COSUMNES RIVER COLLEGE BOULEVARD AND HIGHWAY 99, SOUTH OF SACRAMENTO.</td>
<td></td>
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</tr>
<tr>
<td>SNA Summary:</td>
<td>Comments—</td>
<td></td>
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</tr>
<tr>
<td>Distribution:</td>
<td>HABITAT CONSISTS OF BOTH NATURAL AND MAN-MADE VERNAL POOLS.</td>
<td></td>
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</tr>
<tr>
<td>Ecological:</td>
<td>Threat:</td>
<td></td>
<td></td>
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<tr>
<td>General:</td>
<td>DRY/MIXED SEASON SAMPLING CONDUCTED JAN-APR 1998 OF A CREATED VERNAL POOL AND A CONTROL SITE; UNKNOWN NUMBER OF INDIVIDUALS FOUND.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner/Manager:</td>
<td>UNKNOWN</td>
<td></td>
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</tr>
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Date: 05/15/2003 Commercial Version
### Lepidurus packardi
**Element Code:** CEBRA10010

<table>
<thead>
<tr>
<th>Habitat Associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>General: Habitats vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.</td>
</tr>
<tr>
<td>Micro: Pools commonly found in coarse bottomed swales of unplowed grassland. Some pools are mud-bottomed &amp; highly turbid.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occurrence No.</th>
<th>Map Index</th>
<th>Map Index</th>
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</thead>
<tbody>
<tr>
<td>32</td>
<td>24533</td>
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<table>
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<tr>
<th>Dates Last Seen</th>
<th>Lat/Long</th>
<th>Township</th>
<th>Range</th>
<th>Section</th>
<th>Meridian</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-02-23</td>
<td>38°26'56&quot; / 121°27'29&quot;</td>
<td>07N</td>
<td>05E</td>
<td>20</td>
<td>N</td>
<td>15 ft</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Old Summary</th>
<th>E of Sacramento Regional Wastewater Treatment Plant; on west side of WP RR tracks; 1.2 km N of RR crossing on Simi Road.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution: Habitat consists of water filled depressions within RR row; slightly turbid water; dominant plants: Juncus bicornis, Plagiobothrys stipitatus var. mcchranth, Gnatola esbractata, L韧um Hyssopifolia.</td>
</tr>
<tr>
<td>Threat: Vehicle encroachment (Koford) railroad maintenance and other facility activities.</td>
</tr>
<tr>
<td>General: &gt;100 adults observed breeding and foraging; 1 collected for personal collection; Branchinecta Lynchii has been observed at this site in past. 4/2/1992: Koford observed tadpole shrimp and Linderiella at site.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occurrence No.</th>
<th>Map Index</th>
<th>Map Index</th>
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<tbody>
<tr>
<td>68</td>
<td>34794</td>
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<th>Dates Last Seen</th>
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<th>Township</th>
<th>Range</th>
<th>Section</th>
<th>Meridian</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-04-02</td>
<td>38°20'45&quot; / 121°28'11&quot;</td>
<td>08N</td>
<td>05E</td>
<td>31</td>
<td>N</td>
<td>15 ft</td>
</tr>
</tbody>
</table>

| Old Summary | Corner of Flarin Road and Union Pacific (Western Pacific) RR, west of HWY 99. |

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution: Tadpole shrimp observed by Koford during survey in spring of 1992; Linderiella also present.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occurrence No.</th>
<th>Map Index</th>
<th>Map Index</th>
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<tbody>
<tr>
<td>69</td>
<td>34795</td>
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<th>Township</th>
<th>Range</th>
<th>Section</th>
<th>Meridian</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-04-02</td>
<td>38°28'46&quot; / 121°23'44&quot;</td>
<td>08N</td>
<td>05R</td>
<td>35</td>
<td>N</td>
<td>35 ft</td>
</tr>
</tbody>
</table>

| Old Summary | Corner of Flarin Road and Southern Pacific Traction RR, in Flarin. |

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution: Railroad ditch.</td>
</tr>
</tbody>
</table>

| Owner/Manager | PVT-Union Pacific RR |

| Owner/Manager | PVT-Western Pacific RR |

Date: 05/15/2003
Report: EP2WIDE
Information dated 04/09/2003
<table>
<thead>
<tr>
<th>Occurrence No.</th>
<th>Map Index</th>
<th>List Status</th>
<th>NEDB Element Ranks</th>
<th>Other Lists</th>
<th>Township</th>
<th>Range</th>
<th>Section</th>
<th>Meridian</th>
<th>Elevation</th>
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</thead>
<tbody>
<tr>
<td>70</td>
<td>34796</td>
<td>Dates Last Seen: 38°28'54&quot; / 121°27'55&quot;</td>
<td>Element: 1992-04-02</td>
<td>Federal: Endangered</td>
<td>07N</td>
<td>OSE</td>
<td>06 Qtr SE</td>
<td>M</td>
<td>21 ft</td>
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<td></td>
<td></td>
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<td>Presumed Extant</td>
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<tr>
<td></td>
<td></td>
<td>Symbol Type: POINT</td>
<td>Radius: 80 meters</td>
<td>State: S283</td>
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<td></td>
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<tr>
<td>76</td>
<td>34812</td>
<td>Dates Last Seen: 38°23'44&quot; / 121°27'55&quot;</td>
<td>Element: 1992-04-02</td>
<td>Federal: Endangered</td>
<td>06N</td>
<td>OSE</td>
<td>XX Qtr XX</td>
<td>M</td>
<td>15 ft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lat/Long: 38°23'44&quot; / 121°27'55&quot;</td>
<td>Presumed Extant</td>
<td>State: None</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Symbol Type: POLYGON</td>
<td>Area: 570.1 ac</td>
<td>State: S283</td>
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<td></td>
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<tr>
<td>87</td>
<td>33682</td>
<td>Dates Last Seen: 38°25'24&quot; / 121°27'13&quot;</td>
<td>Element: 1993-03-12</td>
<td>Federal: Endangered</td>
<td>07N</td>
<td>OSE</td>
<td>XX Qtr XX</td>
<td>M</td>
<td>20 ft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lat/Long: 38°25'24&quot; / 121°27'13&quot;</td>
<td>Presumed Extant</td>
<td>State: None</td>
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<tr>
<td></td>
<td></td>
<td>Symbol Type: POLYGON</td>
<td>Area: 1,276.7 ac</td>
<td>State: S283</td>
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</table>

**Lepidurus packardi (cont.)**

**vernal pool, Natural/Zone occurrence**

**Element Code:** ICRA10010

**List Status**
Federal: Endangered
State: None

**NEDB Element Ranks**
Global: G2G3
State: S283

**Other Lists**

**Trend:** Unknown
**Main Source:** KOPFORD, E. 1992 (PEKRS)
**Quad Summary:** FLORIN (3812144/4968)
**County Summary:** SACRAMENTO
**SNA Summary:**
- Location: ALONG UNION PACIFIC RR AND MEADOWVIEW ROAD, WEST OF HWY 99.
- Distribution: ELLIS RANCH & ELK GROVE BLVD EXTENSION/1-5 INTERCHANGE MITIGATION SITES. 1995: 23 WETLANDS SAMPLED. 1996: 74 WETLANDS SAMPLED. LINDIERILLA OCCIDENTALIS & OR MIDWALLEY FAIRY SHRIMP (BRANCHINECTA SP) ALSO OBS.
- Ecological: NATURAL AND CONSTRUCTED HARDPAN VERNAL POOLS IN NON-NATIVE ANNUAL GRASSLAND. WETLAND COMPENSATION/MITIGATION PRESERVE.
- Owner/Manager: PVT-GUPE DEVELOPMENT CO

**Comments**
- VERNAL POOLS AND ROADSIDE DITCHES LOCATED SOMEWHERE IN SECTIONS 29 AND 32.
- Ecological: NATURAL VERNAL POOLS AND MANDMADE ROADSIDE DITCHES.
- General: LEPIDURUS PACKARDI OBSERVED IN 1 OF 4 VERNAL POOL FEATURES INSPECTED IN SECTION 32 AND IN 1 ROADSIDE DITCH INSPECTED IN SECTION 29. SUGNET RECORD #S 134 & 135.
- Owner/Manager: UNKNOWN

**Date:** 05/15/2003
**Report:** RP2WIDE

Information dated 06/09/2003

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**Lepidurus packardi (cont.)**  
vernual pool tadpole shrimp  
Element Code: ICBC10010

<table>
<thead>
<tr>
<th>List Status</th>
<th>NDDB Element Ranks</th>
<th>Other Lists</th>
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<tbody>
<tr>
<td>Federal: Endangered</td>
<td>Global: G2G3</td>
<td>CDUF Status:</td>
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<th>Occurrence No. 88</th>
<th>Map Index: 33681</th>
<th>---Dates Last Seen---</th>
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<tbody>
<tr>
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<tr>
<td>Origin: Natural/Native occurrence</td>
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<td>Site: 1993-03-12</td>
<td>Precision: NON-SPECIFIC</td>
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<td>Presence: Presumed Extant</td>
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<td></td>
<td>Symbol Type: POLYGON</td>
</tr>
<tr>
<td>Trend: Unknown</td>
<td></td>
<td></td>
<td>Area: 1,274.6 ac</td>
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<tr>
<td>Main Source: SUGNET &amp; ASSOC. 1993 (PERS)</td>
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<tr>
<td>Quad Summary: FLORIN (3812144/496B)</td>
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<tr>
<td>County Summary: SACRAMENTO</td>
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</tr>
<tr>
<td>SNA Summary:</td>
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<td></td>
</tr>
<tr>
<td>Location: SOUTH OF FLORIN ROAD &amp; NORTH OF BEACON CREEK. ON THE SOUTHERN EDGE OF SACRAMENTO.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Distribution: MANMADE ROADSIDE DITCHES AND MANMADE VERNAL POOLS LOCATED SOMEWHERE IN SECTIONS 6 AND 8.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Ecological: MOST OF THESE TWO SECTIONS ARE HEAVILY URBANIZED.</td>
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<tr>
<td>Threat: General: LEPIDURUS PACKARDI OBSERVED IN SECTIONS 6 IN A MANMADE VERNAL POOL ON 3/3/93 &amp; IN 1 OF 2 INSPECTED ROADSIDE DITCHES ON 3/12/93. ON 4/2/92 THEY WERE OBSERVED IN 2 OF 3 INSPECTED ROADSIDE DITCHES IN SECTION 8. SUGNET RECORD #8'S 131, 132 &amp; 133.</td>
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<td>Owner/Manager: UNKNOWN</td>
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<th>Map Index: 33683</th>
<th>---Dates Last Seen---</th>
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<td>Presence: Presumed Extant</td>
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<td>Symbol Type: POINT</td>
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<tr>
<td>Trend: Unknown</td>
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<td>Radius: 3/5 mile</td>
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<tr>
<td>Main Source: SUGNET &amp; ASSOC. 1993 (PERS)</td>
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<tr>
<td>Quad Summary: FLORIN (3812144/496B)</td>
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<tr>
<td>County Summary: SACRAMENTO</td>
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<tr>
<td>SNA Summary:</td>
<td></td>
<td></td>
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<tr>
<td>Location: SOUTH OF FLORIN RD, NORTH OF GERBER RD, EAST OF POWER INN RD, &amp; WEST OF FRENCH RD. SOUTH OF FLORIN.</td>
<td></td>
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<tr>
<td>Comments:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Distribution: MANMADE ROADSIDE DITCH SOMEWHERE IN SECTION 2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecological: MOST OF THIS SECTION IS URBANIZED.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Threat: General: LEPIDURUS PACKARDI WAS OBSERVED IN A ROADSIDE DITCH. NO B. LYNCHI OBSERVED. SUGNET RECORD #130.</td>
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<td></td>
<td></td>
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<tr>
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<th>Map Index: 33691</th>
<th>---Dates Last Seen---</th>
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<tbody>
<tr>
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<td>UTM: Zone-10 N4262524 E631172</td>
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<td>Precision: NON-SPECIFIC</td>
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<td>Symbol Type: POINT</td>
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<tr>
<td>Trend: Unknown</td>
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<td>Radius: 3/5 mile</td>
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<tr>
<td>Main Source: SUGNET &amp; ASSOC. 1993 (PERS)</td>
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<td></td>
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<td>Quad Summary:</td>
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<tr>
<td>SNA Summary:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Location: SOUTH OF 47TH AVE, NORTH OF FLORIN RD, EAST OF WOODBINE AVE. ON SOUTHERN END OF SACRAMENTO.</td>
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<td>Comments:</td>
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<tr>
<td>Distribution: ROADSIDE DITCHES SOMEWHERE IN SECTION 31.</td>
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<tr>
<td>Ecological: MOST OF THIS SECTION IS URBANIZED.</td>
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<tr>
<td>Threat: General: LEPIDURUS PACKARDI WAS OBSERVED IN A ROADSIDE DITCH ON 4/2/92. SUGNET RECORD #144.</td>
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<td>Owner/Manager: UNKNOWN</td>
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### Lepidurus packardi (cont.)

**Element Code:** ICBCR10010  

<table>
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<th>Occurrence No.</th>
<th>Map Index</th>
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<th>Other Lists</th>
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<tr>
<td>93</td>
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<td>Federal: Endangered</td>
<td>Global: G2G3</td>
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- **Occurrence No.:** 93  
- **Map Index:** 33692  
- **Dates Last Seen:**  
- **Lat/Long:** 38°10'38" / 121°23'56"  
- **UTM:** Zone-10 N4263475 E639610  
- **Precision:** SPECIFIC  
- **Symbol Type:** POLYGON  
- **Area:** 1,513.2 ac  
- **Element:** 1992-04-03  
- **Site:** 1992-04-03  
- **Main Source:** SUGNET & ASSOC. 1993 (PERS)  
- **Quad Summary:** SACRAMENTO EAST (3812154/512C)*, FLORIN (3812144/496B)  
- **County Summary:** SACRAMENTO  
- **Shape Summary:** SOUTH OF FRUITRIDGE RD, NORTH OF FLORIN RD, EAST OF POWER INN RD, AND WEST OF FLORIN PERKINS RD.  
- **Distribution:** MANMADE ROADSIDE DITCHES LOCATED SOMEWHERE IN SECTIONS 26 AND 35.  
- **Ecological:** MOST OF SECTION 26 IS URBANIZED.  
- **General:** LEPIDURUS PACKARDI OBSERVED IN A ROADSIDE DITCH IN SECTION 26 AND A ROADSIDE DITCH IN SECTION 35. SUGNET RECORD #8 143 & 145.  
- **Owner/Manager:** UNKNOWN  
- **Township:** 06N  
- **Range:** 05E  
- **Section:** 35 Qtr XX  
- **Meridian:** M  
- **Elevation:** 35 ft

---

### Lepidurus packardi (cont.)

**Element Code:** ICBCR10010  

<table>
<thead>
<tr>
<th>Occurrence No.</th>
<th>Map Index</th>
<th>List Status</th>
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<th>Other Lists</th>
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<tbody>
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<td>114</td>
<td>37071</td>
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<td>Global: G2G3</td>
<td>CDFG Status:</td>
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- **Occurrence No.:** 114  
- **Map Index:** 37071  
- **Dates Last Seen:**  
- **Lat/Long:** 38°27'22" / 121°24'43"  
- **UTM:** Zone-10 N4257424 E638543  
- **Precision:** NON-SPECIFIC  
- **Symbol Type:** POLYGON  
- **Area:** 161.6 ac  
- **Element:** 1998-04-XX  
- **Site:** 1998-04-XX  
- **Main Source:** JONES & STOKES ASSOC. 1996 (PERS)  
- **Quad Summary:** FLORIN (3812144/496B)  
- **County Summary:** SACRAMENTO  
- **Shape Summary:** INTERSECTION OF COSUMNES RIVER COLLEGE BOULEVARD AND HIGHWAY 99, SOUTH OF SACRAMENTO  
- **Distribution:** HABITAT CONSISTS OF BOTH NATURAL AND MAN-MADE VERNAL POOLS.  
- **Ecological:**  
- **General:** ONE POND SURVEYED; LEPIDURUS PACKARDI DETECTED ON 10 FEB 1993. DRY/WET SEASON SAMPLING CONDUCTED JAN-APR 1998 OF A CREATED VERNAL POOL AND A CONTROL SITE, 4 INDIVIDUALS FOUND.  
- **Owner/Manager:** UNKNOWN  
- **Township:** 07N  
- **Range:** 05E  
- **Section:** 15 Qtr XX  
- **Meridian:** M  
- **Elevation:** 25 ft

---

*Date: 05/15/2003  Commercial Version  Report: EP2WIDE  Information dated 04/05/2003*
### Downingia pusilla

**dwarf downingia**

**Element Code:** PDCAM060CO

<table>
<thead>
<tr>
<th>List Status</th>
<th>NDDDB Element Ranks</th>
<th>Other Lists</th>
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<tbody>
<tr>
<td>Federal: None</td>
<td>Global: G1</td>
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<tr>
<td>State: None</td>
<td>State: S3.1</td>
<td>R-K-D Code: 1-2-1</td>
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#### Habitat Associations

**General:** VALLEY AND POTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.

**Micro:** VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS. 1-485M.

### Occurrence No. 56

<table>
<thead>
<tr>
<th>Map Index: 26055</th>
<th>Dates Last Seen</th>
<th>Latitude/Longitude: 38°24'32&quot; / 121°29'21&quot;</th>
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<td>Presence: Presumed Extant</td>
<td>Threshold: 07N</td>
<td>Symbol Type: POLYGON</td>
</tr>
<tr>
<td>Trend: Unknown</td>
<td>Range: 04E</td>
<td>Area: 9.7 ac</td>
</tr>
<tr>
<td>Main Source: BANLETT, TALBERT, AND VAN KESS 1990 (OBS)</td>
<td>Section: 36 Qtr SE</td>
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<tr>
<td>SNA Summary:</td>
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<tr>
<td>Location: WEST OF 1-5 AT THE ELK GROVE BLVD INTERCHANGE, ELK GROVE.</td>
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<tr>
<td>Comments:</td>
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</table>

### Distribution

Located at two sites in this vicinity; one is along either side of culvert under Elliot Ranch Road and the second is about 0.3 mile west of the culvert.

### Ecological

 Vernal pool surrounded by annual grassland. Associated with Allocarya undulata, A. stipitata microphylla, Phillocarpus brevissimus, Alopecurus saccatus, Eryngium Aristatum, and Lolium multiflorum. Soils are San Joaquin Silty Loam.

### Threat

Past road construction activities have altered site. Interchange is to avoid the site but may influence hydrology.

### General

Hundreds to thousands of plants observed in 1990. Site included within proposed Stone Lake Wildlife Refuge and is presently managed by Sacramento County Department of Parks and Recreation.

### Owner/Manager

SAC COUNTY-PARKS & REC
<table>
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<th>Occurrence No. 31</th>
<th>Map Index: 26234</th>
<th>Dates Last Seen</th>
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<td>Presence: Presumed Extant</td>
<td>Main Source: PRESTON, R. 1993 (OBS)</td>
<td>Quadrangle: FLORIN (3812144/496B)</td>
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<td>Meridian: M</td>
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<td>County Summary: SACRAMENTO</td>
<td>SHA Summary: NORTH OF SHELDON ROAD AND 0.7 MILE EAST OF HIGHWAY 99, ELK GROVE.</td>
<td>Elev. 35 ft</td>
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</table>

**Habitat Association:**

- **General:** VERNAL POOLS. MANY HISTORICAL OCCURRENCES ARE EXTIRPATED.
- **Micro:** IN BEDS OF VERNAL POOLS. 1-880M.
- **Distribution:** MAPPED ABOUT 0.25 MILE NORTH OF SHELDON ROAD WITHIN THE SW 1/4 OF THE SW 1/4 OF SECTION 24.
- **Ecological:** DEEP NORTHERN CLAYPAINT VERNAL POOLS ON CLAY CLAY SOILS. POOLS DOMINATED BY ERYNGIUM CASTERNE, DOWNINGIA BICORNA, AND LASTHENA GLABERRA. OTHER ASSOCIATES INCLUDE ELEOCHARIS MACROSTACHYS AND PLAGIOBOTHrys STIPITATUS MICRANTHUS.
- **Threat:** PROPOSED HOUSING DEVELOPMENT, POOLS SCHEDULED TO BE FILLED.
- **General:** MORE THAN 2500 PLANTS OBSERVED IN 1993. POOLS IN FAIRLY GOOD SHAPE ALTHOUGH ADJACENT LAND HAD BEEN FARmed.
- **Population may be salvaged in conjunction with the project vernal pool mitigation plan.**
- **Owner/Manager:** PVT

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<th>Occurrence No. 40</th>
<th>Map Index: 29100</th>
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<td>Main Source: CURLETTE, J. 1995 (OBS)</td>
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<tr>
<td>County Summary: SACRAMENTO</td>
<td>SHA Summary: ABOUT 1.5 MI E OF STONE LAKE, 1.4 MI SW OF JCT FRANKLIN BLVD AND ELK GROVE BLVD.</td>
<td>Elev. 13 ft</td>
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**Comments:**

- **Ecological:** VERNAL POOLS WITH DOWNINGIA ORNATISSIMA, NAVARRETTA LUCOCEPHALA, CASTILLEJA EKERTIA, AND LEPIDIUM LATIPES.
- **Threat:** LAND USED FOR CATTLE PRODUCTION; GRAFTING THREATENS.
- **General:** AT LEAST 50 PLANTS IN 1995.
- **Owner/Manager:** UNKNOWN

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<td>Main Source: CURLETTE, J. 1995 (OBS)</td>
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<tr>
<td>County Summary: SACRAMENTO</td>
<td>SHA Summary: ALONG N SIDE OF SIMS ROAD, 0.15-0.4 MI E OF JCT WITH FRANKLIN BLVD.</td>
<td>Elev. 18 ft</td>
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**Comments:**

- **Distribution:** 300 FT N OF SIMS ROAD.
- **Ecological:** VERNAL POOL COMPLEX WITH LASTHENA GLABERRA, RANUNCULUS BGNARIENSIS, PLAGIOBOTHrys STIPITATUS, DOWNINGIA ORNATISSIMA, D. BICORNA AND LEPIDIUM LATIPES.
- **Threat:** TREE PLANTING/RESTORATION ADJACENT TO VERNAL POOLS.
- **General:** 300 PLANTS IN 1995. SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT LAND.
- **Owner/Manager:** SAC COUNTY
Juglans hindsii
Northern California black walnut
Element Code: POJUN02040

List Status
Federal: Species of Concern
State: None

NEDB Element Ranks
Global: G1
State: Sl.1

Other Lists
CMPS List: 1B

Habitat Associations
General: RIPARIAN FOREST, RIPARIAN WOODLAND. TWO EXTANT NATIVE STANDS REMAIN; WIDELY NATURALIZED.
Micro: DEEP ALLUVIAL SOIL ASSOCIATED WITH A CREEK OR STREAM. 0.398M.

Occurrence No. 1
Map Index: 17206

Occ Rank: None
Origin: Natural/Native occurrence
Presence: Extirpated
Trend: Unknown
Main Source: FULLER, T. 1978 (LIT)
Quad Summary: RIO VISTA (3812126/480B)*, ISLETON (3812125/480A), COURTLAND (3812135/497D), FLORIN (3812144/496B), CLARKSBURG (3812145/497A)
County Summary: SACRAMENTO, SOLANO, YOLO
SNA Summary: Location: ALONG THE SACRAMENTO RIVER, BETWEEN FREEMONT AND RIO VISTA, MOSTLY AT WALNUT GROVE.

Dates Last Seen
Lat/Long: 38°18′25″ / 121°34′23″
Element: XXXX-XX-XX
UTM: Zone-10 N4240614 E524755
Site: 2002-10-XX
Precision: NON-SPECIFIC
Symbol Type: POLYGON
Area: 5.630.6 ac

Township: DSN
Range: 04E
Section: XX Qtr XX
Meridian: M
Elevation: 0

Distribution: TREES WERE ALONG BOTH SIDES OF RIVER.
Ecological: ON HIGH SPOTS ALONG THE BANK.
Threat: TREES NO LONGER REMAIN AT THIS SITE, THEY WERE CUT PRIOR TO 1949 ACCORDING TO SMITH, 1949.
General: SITE EXTIRPATED ACCORDING TO CALLIZO (2002).
Owner/Manager: UNKNOWN

Date: 05/15/2003
Report: RP2WIDE
Commercial Version
Information dated 04/09/2003
Sagittaria sanfordii
Sanford's arrowhead
Element Code: PMALI04900

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<td>CNPS List: 1B</td>
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<td>State: G3.2</td>
<td>R-E-D Code: 2-2-3</td>
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Habitat Associations:
General: MARRSHES AND SWAMPS.
Micro: IN STANDING OR SLOW-MOVING FRESHWATER PONDS, MARRSHES, AND DITCHES. 0-610M.

Occurrence No. 16
Map Index:24535
Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: WITHAM, C. 1992 (OBS)
Quad Summary: FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary: ELDER CREEK, FROM REES RD EAST JUST PAST FRENCH RD, ELK GROVE.
Location: SACRAMENTO

--Dates Last Seen--
Element: 1993-XX-XX
Site: 1993-XX-XX
UTM: Zone-10 N4260500 E640060
Precision: SPECIFIC
Symbol Type: POLYGON
Area: 33.9 ac

Township: 07N
Range: 05E
Section: 02 Qtr SE
Meridian: M
Elevation: 40 ft

Distribution:
Ecological: GROWING IN FLOWING STREAM IN ASSOCIATION WITH LEPTOCOCCA PASCULARIS, ECHINOCHLOA CRUS-GALLI, TYPHA, CYPERUS ERAGROSTIS, LUDWIGIA PARADOX, ALISMA PLANTAGO-AQUATICA.
Threat: CREEK REALIGNMENT, HERBICIDE SPRAYING, ADJACENT RESIDENTIAL DEVELOPMENT, AND TRASH DUMPING ARE THREATS.
Owner/Manager: PVT, ELK GROVE SCHOOL DIST

Occurrence No. 17
Map Index:24536
Occ Rank: Unknown
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: NORTON, K. 1993 (MAP)
Quad Summary: FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary: BEACON CREEK, SOUTH OF ELSIE AVE AND EAST OF POWER INN RD, ELK GROVE.
Location: BEACON CREEK, SOUTH OF ELSIE AVE AND EAST OF POWER INN RD, ELK GROVE.

--Dates Last Seen--
Element: 1993-XX-XX
Site: 1993-XX-XX
UTM: Zone-10 N4259422 E639763
Precision: SPECIFIC
Symbol Type: POLYGON
Area: 23.1 ac

Township: 07N
Range: 05E
Section: 11 Qtr SW
Meridian: M
Elevation: 25 ft

Distribution:
Ecological: MAPPED AS TWO POLYGONS; ONE IMMEDIATELY SOUTH OF ELSIE AVE, THE OTHER IS ABOUT 0.15 MILE EAST OF POWER INN ROAD ON EITHER SIDE OF IONA WAY.
Threat: CEMENT LINED CHANNEL WITH MUD.
General: BETTER ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED.
Owner/Manager: UNKNOWN

Occurrence No. 19
Map Index:24538
Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown
Main Source: DAINS, V. 1991 (OBS)
Quad Summary: FLORIN (3812144/496B), ELK GROVE (3812143/496A)
County Summary: SACRAMENTO
SNA Summary: STRAWBERRY CREEK, SOUTH OF CALVINE RD AND WEST OF ELK GROVE-FLINRD, ELK GROVE.
Location: STRAWBERRY CREEK, SOUTH OF CALVINE RD AND WEST OF ELK GROVE-FLINRD, ELK GROVE.

--Dates Last Seen--
Element: 1993-XX-XX
Site: 1993-XX-XX
UTM: Zone-10 N4256793 E641511
Precision: SPECIFIC
Symbol Type: POLYGON
Area: 38.8 ac

Township: 07N
Range: 05E
Section: 24 Qtr N
Meridian: M
Elevation: 30 ft

Distribution:
Ecological: THREE COLONIES MAPPED ALONG THE CREEK WEST OF ELK GROVE-FORN RD AND ALONG EITHER SIDE OF THE SPRR TRACKS.
Threat: ALONG DRIED CREEK CHANNEL. TРИКОLOURED BLACKBIRDS OCCUR FURTHER DOWNSTREAM.
Owner/Manager: PVT

Date: 05/15/2003
Commercial Version
Report: RF2WIDE
Information dated 04/09/2003
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<td>Main Source: KNOX, K. 1992 (PB84)</td>
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<td>Distribution: JUST NORTH OF COUSUMSS RIVER BLVD IN CREEK ALONG BOTH SIDES OF BRUCEVILLE ROAD, JUST WITHIN SACRAMENTO CITY LIMITS.</td>
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<tr>
<td>Ecological: IN SHALLOW SLOW MOVING WATER.</td>
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<tr>
<td>Location: BEACH LAKE, ALONG DIKE ADJACENT TO MORRISON CREEK, 2 km (1.8 mi) SOUTH OF FREEMONT.</td>
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<tr>
<td>Distribution: HISTORIC BEACH LAKE EXTENDED ALONG EITHER SIDE OF WHAT IS NOW 1-5. THIS PORTION OF BEACH LAKE REFERS TO MARSHY AREA SOUTH OF FREEMONT AND BETWEEN 1-5 AND THE SACRAMENTO RIVER.</td>
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<tr>
<td>Ecological: GROWING JUST OFFSHORE IN 1-2 FEET OF WATER. ASSOCIATES INCLUDE TYBA LATIFOLIA, LUDWIGIA PEPLOIDES, AND SCIRPUS ACUTUS. GIANT GARTER SNAKE (THAMNOPHIS GIIGA) OBSERVED JUST EAST OF THE SAGITTARIA.</td>
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<td>Threat: HERBICIDE APPLICATION.</td>
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<tr>
<td>General: 3-4 COLONIES OBSERVED IN 1992. LAKE OWNED BY BEACH LAKE PROPERTIES BUT MAY BECOME PART OF A COUNTY PRESERVE. CALTRANS RECREATED WETLANDS MITIGATION BANK IS LOCATED TO THE EAST, BETWEEN BEACH LAKE AND 1-5.</td>
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<tr>
<td>Owner/Manager: PVY-BEACH LAKE PROPERTIES</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date: 05/15/2003
Report: RF2WIDE

Page 32

Information dated 04/09/2003
### Sagittaria sandfordii (cont.)

**Sanford's arrowhead**

**Element Code:** PMAL104000

<table>
<thead>
<tr>
<th>Occurrence No.</th>
<th>Map Index:</th>
<th>List Status</th>
<th>NODC Element Ranks</th>
<th>Other Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>30130</td>
<td></td>
<td>Global: G3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Federal: None</td>
<td>State: S3.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CMPS List: 1B</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R-E-D Code: 2-2-3</td>
<td></td>
</tr>
</tbody>
</table>

**Dates Last Seen:**
- **Lat/Long:** 38°29'47" / 121°27'02"
- **Element:** 1993-XX-XX
- **Site:** 1993-XX-XX
- **Precision:** SPECIFIC
- **Symbol Type:** POLYGON
- **Area:** 11.0 ac
- **Township:** 08N
- **Range:** 05E
- **Section:** 32 Qtr SE
- **Meridian:** M
- **Elevation:** 20 ft

**Occurrence No.**
- **Rank:** Unknown
- **Origin:** Natural/Native occurrence
- **Presence:** Presumed Extant
- **Trend:** Unknown
- **Main Source:** NORTON, K. 1993 (MAP)
- **Quad Summary:** FLORIN (3812144/4968)
- **County Summary:** SACRAMENTO
- **SNA Summary:** MORRISON CREEK AT FLORIN ROAD, SACRAMENTO.
- **Comments:** ALONG EITHER SIDE OF FLORIN ROAD, ABOUT 0.4 MILE EAST OF FRANKLIN BLVD.

**Ecological:**
- **Threat:** ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED.

**Owner/Manager:** UNKNOWN

---

### Occurrence No. 41

**Map Index: 30131**

**Dates Last Seen:**
- **Lat/Long:** 38°28'34" / 121°27'01"
- **Element:** 1993-XX-XX
- **Site:** 1995-05-16
- **Precision:** SPECIFIC
- **Symbol Type:** POLYGON
- **Area:** 12.2 ac
- **Township:** 07N
- **Range:** 08E
- **Section:** 08 Qtr NE
- **Meridian:** M
- **Elevation:** 20 ft

**Occurrence No.**
- **Rank:** None
- **Origin:** Natural/Native occurrence
- **Presence:** Possibly Extinct
- **Main Source:** MOSAL, T. & J. MOSAL 1995 (OBS)
- **Quad Summary:** FLORIN (3812144/4968)
- **County Summary:** SACRAMENTO
- **SNA Summary:** ELDER CREEK AT FRANKLIN BLVD, SACRAMENTO.
- **Comments:** ALONG EITHER SIDE OF FRANKLIN BLVD, ABOUT 0.15 MILE NORTH OF MACK ROAD.

**Ecological:**
- **Threat:** CONCRETE CHANNEL. THE ONLY VEGETATION OBSERVED IN 1995 WAS VERY SPARSE LUDWIGIA PELOIDEA. VERY LITTLE AVAILABLE SUBSTRATE.

**General:** UNKNOWN NUMBER OF PLANTS REPORTED AT THIS SITE BY NORTON IN 1991. REPEATED HIGH WATER EVENTS OR CHANNEL MAINTENANCE MAY HAVE SCORCHED PLANTS FROM THIS CHANNEL; SHOULD BE MONITORED FOR RECOLONIZATION. SITE SURROUNDED BY URBAN SPRAWL.

**Owner/Manager:** CITY OF SACRAMENTO

---

### Occurrence No. 42

**Map Index: 30132**

**Dates Last Seen:**
- **Lat/Long:** 38°28'15" / 121°25'02"
- **Element:** 1993-XX-XX
- **Site:** 1993-XX-XX
- **Precision:** SPECIFIC
- **Symbol Type:** POLYGON
- **Area:** 16.7 ac
- **Township:** 07N
- **Range:** 05E
- **Section:** 10 Qtr SW
- **Meridian:** M
- **Elevation:** 20 ft

**Occurrence No.**
- **Rank:** Unknown
- **Origin:** Natural/Native occurrence
- **Presence:** Presumed Extant
- **Main Source:** NORTON, K. 1993 (MAP)
- **Quad Summary:** FLORIN (3812144/4968)
- **County Summary:** SACRAMENTO
- **SNA Summary:** BEACON CREEK AT HWY 99 AND STOCKTON ROAD, SACRAMENTO.
- **Comments:** MAPPED ABOUT 0.3 MILE SOUTHEAST OF ELSIER AVE AND EXTENDING FROM EAST OF STOCKTON ROAD TO JUST WEST OF HWY 99.

**Ecological:**
- **Threat:** ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED.

**Owner/Manager:** UNKNOWN

---
Sagittaria sanfordii (cont.)
Sanford's arrowhead
Element Code: WMAL10400

--- List Status ---
Federal: Species of Concern
Global: G3
State: None

--- NDDA Element Ranks ---
--- Other Lists ---

--- Dates Last Seen ---
Element: 1998-XX-XX
Site: 1998-XX-XX
UTM: Zone-10 N4252604 E640543
Precision: SPECIFIC
Symbol Type: POLYGON
Area: 9.2 ac

--- Township, Range, Section, Meridian, Elevation ---
Township: 07N
Range: 05E
Section: 35 Qtr SE
Meridian: M
Elevation: 30 ft

Occurrence No. 43
Map Index: 30133

--- Occurrence Information ---
Occ Rank: None
Origin: Natural/Native occurrence
Presence: Possibly Extirpated
Trend: Unknown

Main Source: NORTON, K. 1993 (MAP)
Quad Summary: FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary:

Location: ELK GROVE CREEK WEST OF HWY 99, ELK GROVE.

Comments:
Distribution: MAPPED ABOUT 0.25 MILE NORTH OF ELK GROVE BLVD IN CHANNEL BEHIND WALMART.

Ecological:
Threat:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED. AS OF 1998 THERE WERE NO PLANTS AT THIS LOCATION.

Owner/Manager: UNKNOWN

--- Dates Last Seen ---
Element: 1998-XX-XX
Site: 1998-XX-XX
UTM: Zone-10 N4252604 E640543
Precision: SPECIFIC
Symbol Type: POLYGON
Area: 9.2 ac

--- Township, Range, Section, Meridian, Elevation ---
Township: 07N
Range: 05E
Section: 35 Qtr SE
Meridian: M
Elevation: 30 ft

Occurrence No. 43
Map Index: 30133

--- Occurrence Information ---
Occ Rank: None
Origin: Natural/Native occurrence
Presence: Possibly Extirpated
Trend: Unknown

Main Source: NORTON, K. 1993 (MAP)
Quad Summary: FLORIN (3812144/496B)
County Summary: SACRAMENTO
SNA Summary:

Location: ELK GROVE CREEK WEST OF HWY 99, ELK GROVE.

Comments:
Distribution: MAPPED ABOUT 0.25 MILE NORTH OF ELK GROVE BLVD IN CHANNEL BEHIND WALMART.

Ecological:
Threat:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL; ECOLOGICAL, THREAT, AND OWNERSHIP INFO NEEDED. AS OF 1998 THERE WERE NO PLANTS AT THIS LOCATION.

Owner/Manager: UNKNOWN
Fifth Year Monitoring Report, PAR Environmental Services
February 14, 2003

Mr. Michael Finan  
Chief, Delta Office  
U.S. Army Corps of Engineers  
1325 J Street  
Sacramento, CA 95814-2922  

Re: College Square WD (Regulatory Branch 20020078)

Dear Mr. Finan:

In response to your letter dated January 15, 2003 to Larry John of Granite Bay Holdings, we have taken additional data points within the area as you requested. The data collection was conducted on February 14, 2003. Three separate data collection points were taken within the area, and the data sheets are included for your review. In addition, the data collection locations and GPS coordinates are included on the attached revised wetland delineation map dated February 14, 2003). In summary, the results of the data collection indicate that the necessary three criteria for wetland determination are not present within that specific location.

Please call me at your earliest convenience to schedule a field verification.

Sincerely,  

[Signature]  

Keith C. Kwan  
Senior Biologist  

Attachments  

cc: Mr. Bradley Cutler / Citadel Equities Group, LLC
CORP Consulting, Inc.

ENVIRONMENTAL CONSULTANTS

Object/Site: College Square
Applicant/Owner: G.B.H
County: Sacramento State: CA

Date: 2/14/03 Sample Point: S

Field Investigator(s): M. Buchalski
Plant Community: Annual grassland
Section/Township/Range: T7N, R6E, Sec. 15

Do normal environmental conditions exist site? Yes ☐ No ☐ If no, explain:

Is this an area in the typical situation? Yes ☐ No ☐ Explain: Dicked field

Is this a potential Problem Area? Yes ☐ No ☐ Explain:

HYDROPHYTIC VEGETATION? Yes ☐ No ☐

<table>
<thead>
<tr>
<th>Dominant Species</th>
<th>Ind. Status</th>
<th>Stratum</th>
<th>Rel. % Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIOL BRO</td>
<td>FACU A</td>
<td>H</td>
<td>50</td>
</tr>
<tr>
<td>Uv-1D grass</td>
<td></td>
<td>H</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentage of dominant species that are OBL, FACW, and/or FAC [excluding FAC-]: 0 of 2 = 0 %

Comments:

YDROLOGY

WETLAND HYDROLOGY? Yes ☐ No ☐

Recorded Data: Yes ☐ No ☐ If yes, 

Depth of surface water: none (in.) Depth to free water in pit: none (in.) Depth to saturated soil: none (in.)

Primary Indicators: □ Inundated □ Saturated in Upper 12 in. □ Water Marks □ Drift Lines □ Sediment Deposits □ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
□ Oxidized Root Channels in Upper 12 in. □ Water-stained Leaves □ Local Soil Survey Data □ FAC-Neutral Test □ Other

Comments:

OILS

HYDRIC SOILS? Yes ☐ No ☐

Series/Phase: 217 San Joaquin - Galt complex - level, 0 to 1 % slopes Drainage Class: good, well drained

Taxonomy [Subgroup]: Fine, mixed, thermic Abruptic Durixerolls Confirm Map Type: Yes ☐ No ☐
□ Histosol □ Histic Epipedon □ Sulfidic Odor □ Aquic Moisture Regime □ Reducing Conditions □ Gleyed/Low Chroma Colors □ Concretions
□ High Organic Content in Surface Layer in Sandy Soils □ Organic Streaking in Sandy Soils □ Listed on Hydrics Soil List □ Other

Inclusions [Series/Phase]: Salt components in depressions On Hydrics Soil List: Yes ☐ No ☐

Depth (in.) Horizon Matrix Color Mottle Color Mottle (Abund/Contrast/Size) Texture Concretions Structure
18" A 10YR 3/2 none clay loam

Comments:

WETLAND / WATERS DETERMINATION? Yes ☐ No ☐

* DECISION *

Rationale: No criteria were met.

General comments:

Wetland Type: Upland

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**HERBACEOUS COVER / DOMINANCE WORK SHEET**

<table>
<thead>
<tr>
<th>Species Observed</th>
<th>Actual Cover</th>
<th>Relative Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lolium gramineum</td>
<td>trace</td>
<td>trace</td>
</tr>
<tr>
<td>Vulpia bromoides</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Raphanus sativus</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Taraxacum officinale</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Holocarpha virgata</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Brodiaea sp.</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>un-ID grass seedling</td>
<td>15</td>
<td>trace</td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>7</td>
<td>trace</td>
</tr>
<tr>
<td>Geranium dissectum</td>
<td>trace</td>
<td>.5</td>
</tr>
<tr>
<td>Trifolium hirtum</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Erodium botrys</td>
<td>5</td>
<td>trace</td>
</tr>
<tr>
<td>Brasica nigra</td>
<td>trace</td>
<td></td>
</tr>
</tbody>
</table>

**COVER:**
- Vegetation
- Bare Ground
- Rocks
- Other

**TOTAL =** 100%

**TOTAL SUM (Σ) =** 100%

<table>
<thead>
<tr>
<th>Species (Descending Order)</th>
<th>Relative Cover</th>
<th>Cumulative Cover</th>
<th>Indicator Status</th>
<th>Dominants</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. bromoides</td>
<td>50</td>
<td>50</td>
<td>FACU*</td>
<td></td>
</tr>
<tr>
<td>un-ID grass</td>
<td>15</td>
<td>65</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>7</td>
<td>72</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>T. officinale</td>
<td>5</td>
<td>77</td>
<td>FACU</td>
<td></td>
</tr>
<tr>
<td>H. virgata</td>
<td>5</td>
<td>82</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>T. hirtum</td>
<td>5</td>
<td>87</td>
<td>FACU*</td>
<td></td>
</tr>
<tr>
<td>Erodium botrys</td>
<td>5</td>
<td>92</td>
<td>FACW-</td>
<td></td>
</tr>
<tr>
<td>R. crispus</td>
<td>4</td>
<td>96</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>R. sativus</td>
<td>2</td>
<td>98</td>
<td>DPL</td>
<td></td>
</tr>
<tr>
<td>Erodiaea sp.</td>
<td>2</td>
<td>100</td>
<td>N/L</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL SUM (Σ) =** 100%
CORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Object/Site: College Square
Applicant/Owner: G&H
County: Sacramento
State: CA
Quad(s): Florin, CA

Field Investigator(s): M. Buchalski
Plant Community: Annual grassland
Section/Township/Range: T7N, R5E, Sec. 15

Do normal environmental conditions exist site? Yes ☑ No ☐ If no, explain: 

Typical Situation? Yes ☑ No ☐ Explain: Diked field

Does this a potential Problem Area? Yes ☑ No ☐ Explain: 

GETATION

<table>
<thead>
<tr>
<th>Dominant Species</th>
<th>Ind. Status</th>
<th>Stratum</th>
<th>Rel. % Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>VUL FRO</td>
<td>FAC U*</td>
<td>H</td>
<td>40</td>
</tr>
<tr>
<td>(Un-ID grass)</td>
<td></td>
<td>H</td>
<td>20</td>
</tr>
<tr>
<td>(Un-ID grass)</td>
<td></td>
<td>H</td>
<td></td>
</tr>
<tr>
<td>(Un-ID grass)</td>
<td></td>
<td>H</td>
<td></td>
</tr>
<tr>
<td>Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-): 0.222 = 0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:

HYDROLOGY

<table>
<thead>
<tr>
<th>WETLAND HYDROLOGY?</th>
<th>Yes ☑ No ☐ If yes,</th>
</tr>
</thead>
</table>

Recorded Data: Yes ☑ No ☐ If yes, 

Depth of surface water: None (in.) Depth to free water in pit: None (in.) Depth to saturated soil: 12 (in.)

Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other

Comments:

HYDRIC SOILS? Yes ☑ No ☐

Series/Phase: 217 San Joaquin - Salt complex, leveled, 0 to 1 0% slopes

Taxonomy (Subgroup): Fine, mixed, thermic Abruptic Durixeralfs

Drainage Class: med. well drained

Confirm Map Type: Yes ☑ No ☐

Histosol ☐ Histic Epipodend ☐ Sulfield Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydrick Soils List ☐ Other

Inclusions (Series/Phase): Salt components

On Hydrick Soils List: Yes ☑ No ☐

Depth (in.): 18

<table>
<thead>
<tr>
<th>Horizon</th>
<th>Matrix Color</th>
<th>Mottle Color</th>
<th>Mottle (Abund/Contrast/Size)</th>
<th>Texture, Concretions, Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10YR 7/2</td>
<td>10YR 3/3</td>
<td>abundant</td>
<td>clay loam</td>
</tr>
</tbody>
</table>

Comments:

WETLAND / WATERS DETERMINATION? Yes ☑ No ☐

Rationale: Two of three criteria were not met.

General comments:

Wetland Type: Upland

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### HERBACEOUS COVER / DOMINANCE WORK SHEET

<table>
<thead>
<tr>
<th>Species Observed</th>
<th>Actual Cover</th>
<th>Relative Cover</th>
<th>Cover:</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. bromoides</td>
<td>40</td>
<td>40</td>
<td>Vegetation</td>
</tr>
<tr>
<td>C. solstitialis</td>
<td>10</td>
<td>10</td>
<td>Bare Ground</td>
</tr>
<tr>
<td>Holocarpha virgata</td>
<td>3</td>
<td>3</td>
<td>Rocks</td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>7</td>
<td>7</td>
<td>Other</td>
</tr>
<tr>
<td>Lolium perenne</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>T. caput-medusae</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>UN-ID grass</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Erucocarpus catigerus</td>
<td>trace</td>
<td>trace</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL SUM (Σ) = 100%

### Indicator Status

<table>
<thead>
<tr>
<th>Species (Descending Order)</th>
<th>Relative Cover</th>
<th>Cumulative Cover</th>
<th>Indicator Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. bromoides</td>
<td>40</td>
<td>40</td>
<td>FAC W*</td>
</tr>
<tr>
<td>UN-ID grass</td>
<td>20</td>
<td>60</td>
<td>N/L</td>
</tr>
<tr>
<td>C. solstitialis</td>
<td>10</td>
<td>70</td>
<td>FAC W-</td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>10</td>
<td>80</td>
<td>FAC W+</td>
</tr>
<tr>
<td>L. perenne</td>
<td>8</td>
<td>88</td>
<td>N/L</td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>7</td>
<td>95</td>
<td>N/L</td>
</tr>
<tr>
<td>H. virgata</td>
<td>3</td>
<td>98</td>
<td>N/L</td>
</tr>
<tr>
<td>T. caput-medusae</td>
<td>2</td>
<td>100</td>
<td>N/L</td>
</tr>
</tbody>
</table>

TOTAL SUM (Σ) = 100%
ECORP Consulting, Inc.

ENVIRONMENTAL CONSULTANTS

Routine Wetland Delineation

Project/Site: Collago Square

Applicant/Owner: GBH

County: Sacramento State: CA

Quad(s): Florin, CA

Date: 2/14/03 Sample Point: 7

Field Investigator(s): M. Buchalski

Plant Community: Annual grassland

Section/Township/Range: T7N, RSE, Sec. 15

Do normal environmental conditions exist site? Yes ☐ No ☐ If no, explain:

Atypical Situation? Yes ☐ No ☐ Explain: disked field

Is this a potential Problem Area? Yes ☐ No ☐ Explain:

Hydrophytic vegetation? Yes ☐ No ☐

Hydrology?

Recorded Data: Yes ☐ No ☐ If yes,

Depth of surface water: None (in.) Depth to free water in pit: None (in.) Depth to saturated soil: None (in.)

Primary Indicators: ☐ Imundated ☐ Saturated in upper 12 in. ☐ Water Marks ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other

Comments:

Hydric Soils? Yes ☐ No ☐

Oils

Series/Phase: 217 San Joaquin - Galt complex, levelled, 0±1% slopes

Drainage Class: mod. well drained

Taxonomy [Subgroup]: Fine, mixed, thermic Abruptic Durixsols

Confirm Map Type: Yes ☐ No ☐

☐ Histosol ☐ Histic Epipedon ☐ Sufidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed/Low Chroma Colors ☐ Concretions

High Organic Content in Surface Layer in Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on Hydric Soils List ☐ Other

Inclusions [Series/Phase]: Galt components in depressions

On Hydric Soils List: Yes ☐ No ☐

Depth (in.) Horizon Matrix Color Mottle Color Mottle (Abund/Contrast/Size) Texture Concretions Structure

12 A 10YR 4/6 abundant clay loam

Comments:

Decision

Wetland/Waters Determination? Yes ☐ No ☐

Rationale: Two of three criteria not met.

General Comments: Upland

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### Herbaceous Cover / Dominance Worksheet

<table>
<thead>
<tr>
<th>Species Observed</th>
<th>Actual Cover</th>
<th>Relative Cover</th>
<th>COVER:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taraxacum officinale</td>
<td>15</td>
<td>15</td>
<td>Vegetation</td>
</tr>
<tr>
<td>Centaurea solstitialis</td>
<td>15</td>
<td>15</td>
<td>Bare Ground</td>
</tr>
<tr>
<td>Vulpia bromoides</td>
<td>25</td>
<td>25</td>
<td>Rocks</td>
</tr>
<tr>
<td>T. capit - medusa</td>
<td>10</td>
<td>10</td>
<td>Other</td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>10</td>
<td>10</td>
<td>TOTAL = 100%</td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>5</td>
<td>5</td>
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</tr>
<tr>
<td>Geranium dissectum</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Holocarpha virgata</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Un-ID grass</td>
<td>10</td>
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</table>

**TOTAL SUM (∑) = 100%**

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<th>Relative Cover</th>
<th>Cumulative Cover</th>
<th>Indicator Status</th>
<th>Dominants</th>
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<tr>
<td>V. bromoides</td>
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<td>C. solstitialis</td>
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<td>85</td>
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<td>R. crispus</td>
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<td>N/L</td>
<td></td>
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<tr>
<td>H. virgata</td>
<td>5</td>
<td>100</td>
<td>N/L</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL SUM (∑) = 100%**
February 14, 2003

Mr. Michael Finan
Chief, Delta Office
U.S. Army Corps of Engineers
1325 J Street
Sacramento, CA 95814-2922

Re:  College Square WD (Regulatory Branch 20020078)

Dear Mr. Finan:

In response to your letter dated January 15, 2003 to Larry John of Granite Bay Holdings, we have taken additional data points within the area as you requested. The data collection was conducted on February 14, 2003. Three separate data collection points were taken within the area, and the data sheets are included for your review. In addition, the data collection locations and GPS coordinates are included on the attached revised wetland delineation map dated February 14, 2003). In summary, the results of the data collection indicate that the necessary three criteria for wetland determination are not present within that specific location.

Please call me at your earliest convenience to schedule a field verification.

Sincerely,

[Signature]

Keith C. Kwan
Senior Biologist

Attachments

cc: Mr. Bradley Cutler / Citadel Equities Group, LLC
CORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Date: 2/14/03
Sample Point: 5

Object/Site: College Square
Applicant/Owner: G & H
County: Sacramento
State: CA
Section/Township/Range: T 3 N, R 3 E, Sec 15

HABITAT: 8700

To no normal environmental conditions exist site? Yes ☐ No ☑ If no, explain: 

Is this a potential Problem Area? Yes ☐ No ☑ Explain: 

Vegetation

<table>
<thead>
<tr>
<th>Dominant Species</th>
<th>Ind. Status</th>
<th>Stratum</th>
<th>Rel. % Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>VUL PRO</td>
<td>FACV</td>
<td>H</td>
<td>50</td>
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<tr>
<td>Ulk-1D grass</td>
<td></td>
<td>H</td>
<td>15</td>
</tr>
<tr>
<td>VUL PRO</td>
<td>FACV</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FACV): 0 of 2 = 0 %

Comments:

Hydrology

Recorded Data: Yes ☑ No ☐ If yes,

Depth of surface water: none (in.)

Depth to free water in pit: none (in.)

Depth to saturated soil: none (in.)

Primary Indicators: ☐ Inundated ☑ Satuated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

Comments:

Hydric Soils?

Series/Phase: 217 San Joaquin - Galt complex, levelled, 0 to 1% slopes

Taxonomy (Subgroup):

Drainage Class:

Confirm Map Type: Yes ☐ No ☑

Inclusions (Series/Phase):

Galt components in depressions

On Hydric Soils List: Yes ☑ No ☐

Clay loam

Wetland Type: Upland

©2001 EORP Consulting, Inc.
CITADEL EQUITIES 1 916 791 6456

SCORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Project/Site: College Square
Applicant/Owner: GEH
County: Sacramento
State: CA
Quad(s): Florin, CA

Field Investigator(s): M. Burkholder
Plant Community: Annual grassland
Section/Township/Range: T7N, RSE, Sec. 15

Do normal environmental conditions exist? Yes No Explain: Disked field

Is this a potential Problem Area? Yes No Explain: 

HYDROPHYTIC VEGETATION? Yes No 

GETATION

<table>
<thead>
<tr>
<th>Dominant Species</th>
<th>Ind. Status</th>
<th>Stratum</th>
<th>Rel. % Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>VUL. RKO</td>
<td>FACU*</td>
<td>H</td>
<td>50</td>
</tr>
<tr>
<td>Un-7d grass</td>
<td>H</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-1): \( \frac{e}{2} = \% \)

Comments:

WETLAND HYDROLOGY? Yes No 

HYDROLOGY

Recorded Data: Yes No If yes, 

Depth of surface water: \( \text{in.} \) Depth to free water in pit: \( \text{in.} \) Depth to saturated soil: \( \text{in.} \)

Primary Indicators: \( \square \) Undisturbed \( \square \) Saturated in Upper 12 in. \( \square \) Water Marks \( \square \) Drift Lines \( \square \) Sediment Deposit\s \( \square \) Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):

Water-stained Leaves \( \square \) Local Soil Survey Data \( \square \) FAC-Neutral Test \( \square \) Other

Comments:

HYDROC SOILS? Yes No 

OILS

Series/Phase: 217 San Joaquin - Salt complex leveled @ 1% slope
Taxonomy [Subgroup]: Fine, mixed, thermic Abruptic Argixerolus
Confirm Map Type: Yes No

\( \square \) Histosol \( \square \) Histic Epi(pod)an \( \square \) Sulfide Odor \( \square \) Aquic Moisture Regime \( \square \) Reducing Conditions \( \square \) Gleyed/Low Chroma Colors \( \square \) Concretions

\( \square \) High Organic Content in Surface Layer in Sandy Soils \( \square \) Organic Streaking in Sandy Soils \( \square \) Listed on Hydric Soils List \( \square \) Other

Inclusions [Series/Phase]: Galt components in depressions

Depth (in.): 

<table>
<thead>
<tr>
<th>Depth</th>
<th>Horizon</th>
<th>Matrix Color</th>
<th>Mottle Color</th>
<th>Mottle (Abundant/Comment/Size)</th>
<th>Texture</th>
<th>Concretions</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>( 1 )</td>
<td>( A )</td>
<td>10YR 5/2</td>
<td>10YR 5/2</td>
<td>abundant</td>
<td>clay loam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:

WETLAND / WATERS DETERMINATION? Yes No 

DECISION*

Rationale: Two of three criteria were not met.

General comments: Wetland Type: Upland
ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Routine Wetland Delineation

Project/Site: College Square
Applicant/Owner: G&B
County: Sacramento State: CA
Quad(s): El Dorado, CA

To normal environmental conditions exist site? Yes ☐ No ☐ If no, explain: 

Typical Situation? Yes ☐ No ☐ Explain: disced field

Is this a potential Problem Area? Yes ☐ No ☐ Explain:

Vegetation

<table>
<thead>
<tr>
<th>Dominant Species</th>
<th>Ind. Status</th>
<th>Strat.</th>
<th>Rel % Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) VHS RGO</td>
<td>FACU*</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>2) TAR OFF</td>
<td>FACU</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>3) CEN SOL</td>
<td>N/L</td>
<td>4</td>
<td>15</td>
</tr>
</tbody>
</table>

Percentage of dominant species that are OBL, FACW, and/or FAC (excluding FAC-):

Comments:

Hydrology

Wetland Hydrology? Yes ☐ No ☐

Recorded Data: Yes ☐ No ☐ If yes,

Depth of surface water: None (in.) Depth to free water in pit: None (in.) Depth to saturated soil: None (in.)

Primary Indicators: ☐ Imundated ☐ Saturated in Upper 12 in. ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

☐ Oxidized Root Channels in Upper 12 in. ☐ Water-stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other

Comments:

Soils

Hydrich Soils? Yes ☐ No ☐

Series/Phase: Z17 San Joaquin - Galt complex, leveled, 0 to 1% slopes

Taxonomy (Subgroup): Fine, mixed, thermic, Abruptic Durrgrass

Drainage Class: Well drained

Confirm Map Type: Yes ☐ No ☐

Gleyed/Low Chroma Colors: ☐ Concretions

High Organic Content in Surface Layer in Sandy Soils: ☐ Organic Streaking in Sandy Soils

On Hydrich Soils List: Yes ☐ No ☐

Inclusions [Series/Phase]: Galt components in depressions

Depth (in.): 12

Horizon: A

Matrix Color: 10 YR 5/2

Moisture Color: 10 YR 4/8

Moisture (Abundant/Contrast/Size): abundant

Texture: Clay loam

Comments:

Decision *

Wetland/Waters Determination? Yes ☐ No ☐

Rationale: Two of three criteria not met.

General Comments:

Wetland Type: Upland
THE HOYT COMPANY

660 J Street, Suite 444
Sacramento, CA 95814
Bus: (916) 448-2440
Fax: (916) 448-5305
E-mail: hoytco@thehoytco.com

FACSIMILE TRANSMITTAL

DATE: 2/18/03
TO: Bedy Sherhall
FROM: Wendy Hoyt

FAX# 264-7483
BUS.# 7185

NUMBER OF PAGES: 4
(including cover sheet)

Comments: I have put the "original" in the mail as I fear this may be hard to read.

Please call if message received was incomplete or illegible.

Original to follow □
Please call to confirm receipt □
CONFIDENTIAL □
### HERBACEOUS COVER / DOMINANCE WORK SHEET

<table>
<thead>
<tr>
<th>Species Observed</th>
<th>Actual Cover</th>
<th>Relative Cover</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Centaurea solstitialis</td>
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<td>15</td>
</tr>
<tr>
<td>Vulpia bromoides</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>T. caput-medusae</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Vicia sp.</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Ranunculus crispa</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Geranium dissectum</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Helianthus annuus</td>
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</tr>
<tr>
<td>V. ID grass</td>
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</tbody>
</table>

**COVER:**
- Vegetation: 100%
- Bare Ground: 
- Rocks: 
- Other: 
- TOTAL = 100%

**TOTAL SUM (Σ) = 100%**

<table>
<thead>
<tr>
<th>Species (Descending Order)</th>
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<th>Cumulative Cover</th>
<th>Indicator Status</th>
<th>Dominants</th>
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<tbody>
<tr>
<td>V. bromoides</td>
<td>25</td>
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<td>FACU</td>
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<tr>
<td>T. officinale</td>
<td>15</td>
<td>40</td>
<td>FACU</td>
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</tr>
<tr>
<td>C. solstitialis</td>
<td>15</td>
<td>55</td>
<td>N/L</td>
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</tr>
<tr>
<td>T. caput-medusae</td>
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<td>N/L</td>
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<td>N/L</td>
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<td>H. virgata</td>
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<td>N/L</td>
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</table>

**TOTAL SUM (Σ) = 100%**
**HERBACEOUS COVER / DOMINANCE WORK SHEET**

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<td>Holocarpha virgata</td>
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<tr>
<td>Vicia sp.</td>
<td>7</td>
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<tr>
<td>Loliun perenne</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>T. caput-medusa</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Rumex crispus</td>
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<td>UN-ID grass</td>
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</table>

**COVER:**
- Vegetation: 100%
- Bare Ground: __________
- Rocks: __________
- Other: __________

**TOTAL =** 100%

---

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<th>Cumulative Cover</th>
<th>Indicator Status</th>
<th>Dominants</th>
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<tbody>
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<td>V. bromoides</td>
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<td>40</td>
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<td>20</td>
<td>60</td>
<td>N/L</td>
<td>__________</td>
</tr>
<tr>
<td>C. solstitialis</td>
<td>10</td>
<td>70</td>
<td>N/L</td>
<td>__________</td>
</tr>
<tr>
<td>Rumex crispus</td>
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<td>80</td>
<td>FACW*</td>
<td>__________</td>
</tr>
<tr>
<td>L. perenne</td>
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<td>88</td>
<td>FAC*</td>
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<td>__________</td>
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<td>H. virgata</td>
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<td>__________</td>
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<tr>
<td>T. caput-medusa</td>
<td>2</td>
<td>100</td>
<td>N/L</td>
<td>__________</td>
</tr>
</tbody>
</table>

**TOTAL SUM (Σ) =** 100%

*Copyright ©2001 ECORP Consulting, Inc.*
DRAFT LETTER

March 4, 2003

The Hoyt Company
Attn: Wendy Hoyt-President
660 J Street, Suite 444

Re: P00-147; College Square, Land Use Tabulations/Information
Revision to PUD Submittal

Dear Wend"y,

Regarding the PUD submittal for subject project, it has come to our attention that there is conflicting information between the land use tabulations listed on Architectural Sheet SA-01 dated January 28th, 2003, Civil Sheet 2 of 5 dated November 10th, 2003, and the net and gross acreages listed within each parcel on the parcel map. The net and gross acreage listed on each of the land use summary charts match up with each other from parcel one through twenty-five, however parcels twenty six through thirty five and the associated totals for each are conflicting.

The land use tabulations for parcels twenty six through thirty five have been revised as indicated within the attached 8 1/2 x 11 sheet PUD Rev 01, and revisions have been made to the Architectural and Civil full size plan documents affected by this revision. Each of the sheets that have been revised, listed below, have been identified with a revision number one in the title block and dated March 4th, 2003.

Twenty-six copies of the following at full size (folded to 8 1/2x11) are included as well as the same number at a reduced size (11x17) for your use and distribution:
- Architectural Sheet SA-01 “Proposed Project PUD Schematic Plan and Tabulations”
- Architectural Sheet SA-02 “Proposed Project Pedestrian Circulation and Parking Plan”
- Architectural Sheet SA-03 “Proposed Project Site Phasing Plan”
- Architectural Sheet SA-05 “Proposed Project Building Limit Site Plan”
- Civil Sheet 2 of 5 “Tentative Parcel Map”
- Civil Sheet 3 of 5 “General Plan Amendment”
- Civil Sheet 4 of 5 “Community Plan Amendment”
- Civil Sheet 5 of 5 “Rezone Exhibit”

Please review the documents and if you have questions or should you need assistance in the resubmittal to City Agencies, do not hesitate to call me.

Regards,

Dan Richards-AIA

Encl.
PUD Rev 01

Land Use Summary Chart (Revision 01)

<table>
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<th>Parcel #</th>
<th>Net Acreage +-</th>
<th>Gross Acreage +-</th>
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<tr>
<td><strong>Total</strong></td>
<td><strong>53.64</strong></td>
<td><strong>63.27</strong></td>
</tr>
</tbody>
</table>
January 16, 2003

Mr. Bradley Shirhall
City of Sacramento
1231 I Street, Suite 300
Sacramento, California 95814

RE: College Square – Special-Status Species Information

Dear Mr. Shirhall:

As requested, we have enclosed pertinent information regarding special-status species information relating to the College Square property. As stated in the College Square – Clean Water Act – Section 404 application to federal and state resource agencies, the applicant assumed presence of listed aquatic invertebrate. The application included the following:

"The 0.04 acre of vernal pool may represent habitat for the federally-listed vernal pool fairy shrimp (Branchinecta lynchi) or vernal pool tadpole shrimp (Lepidurus packardi). In addition, the 1.85 acre constructed pond was created as mitigation for a previously authorized project (Regulatory No. 199300334). Monitoring conducted for that mitigation habitat has indicated the presence of the vernal pool tadpole shrimp. Finally, focused surveys for wetland-inhabiting rare plants have been conducted. None were identified. Because the project may affect a federally-listed species, we request that you initiate consultation with the U.S. Fish and Wildlife Service, pursuant to Section 7 of the federal Endangered Species Act."

Also enclosed, is a supplemental package that ECORP sent to U.S. Fish and Wildlife Service to facilitate the agency’s review of the project. Included in this information is a letter addressing a rare plant survey ECORP conducted on the site (Attachment A).

It should be noted that the U.S. Fish and Wildlife Service has completed Endangered Species Act - Section 7 Consultation and have issued an Incidental Take Permit for impacts to a protected species.

I trust this satisfies your request, however if you have any questions please contact me at (916) 782-9100.

Sincerely,

Jim Stewart
President

Cc: Bradley Cutler / Citadel Equities Group LLC
December 15, 2000

Mr. Ken Fuller
U.S. Fish and Wildlife Service
Sacramento Valley Branch
Endangered Species Division
2800 Cottage Way, W-2605
Sacramento, CA 95825

RE:  **COLLEGE MARKETPLACE, CORPS OF ENGINEERS REGULATORY No. 200000334, U.S. FISH AND WILDLIFE SERVICE FILE No. 01-F-0019**

Dear Mr. Fuller:

Please find attached the following items you requested during our field meeting on 11 December 2000, and in a subsequent telephone conversation on 13 December 2000:

A. Wetland Delineation map revised to indicate acreages of individual wetland features.

B. 5th Year Monitoring Report, Vernal Pool and Strawberry Creek Mitigation, Cosumnes River Boulevard-Calvine Road Interchange at State Route 99, Sacramento County, California (PAR Environmental Services 1999).

C. ECORP file documentation regarding wetland-inhabiting special-status plant surveys conducted at the project site.

The applicant's contact information is:

Mr. Doug Sutherland
College Marketplace, LLC
C/o Citadel Equities
8211 Sierra College Boulevard, #418
Roseville, CA 95661

Voice: (916) 791-6466
Fax: (916) 791-6459

Should you have questions, or require additional information, please let me know.

Sincerely,

Hal Freeman
Vice President

Attachment(s)

Cc: Doug Sutherland, College Marketplace, LLC (w/o attachments)
Marcus Lo Duca, Sandberg and Lo Duca (w/o attachments)
Mr. Richard Smith, U.S. Fish and Wildlife Service, Wetlands Branch
Nancy Haley, U.S. Army Corps of Engineers (w/o attachments)
Attachments

Attachment A – Wetland Delineation Map

Attachment B – Fifth Year Monitoring Report, Par Environmental Services

Attachment C – Rare Plant Survey
Wetland Delineation Map
Attachment B

Fifth Year Monitoring Report, Par Environmental Services
FIFTH YEAR MONITORING REPORT
VERNAL POOL AND
STRAWBERRY CREEK MITIGATION
COSUMNES RIVER BOULEVARD -
CALVINE ROAD INTERCHANGE
AT STATE ROUTE 99,
SACRAMENTO COUNTY, CALIFORNIA

FINAL REPORT

Prepared for:

City of Sacramento
Department of Planning and Development
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October 27, 1999
EXECUTIVE SUMMARY

Data from the fifth year of vegetation monitoring show that the created vernal pool meets or nearly meets the success criteria established in 1994 at the outset of this mitigation monitoring project. The dominant species in the created vernal pool is now slender popcorn flower. This species is classified as hydrophytic vegetation, and therefore the created pool has met the success criteria of dominance by hydrophytic species. The created pool shows vernal pool hydrologic conditions, hydric soils, and dominance by hydrophytic vegetation, and therefore meets the criteria of a jurisdictional wetland, one of the objectives of the mitigation. In addition, 66 percent of the relative plant cover in the created pool is comprised of native vernal pool species, meeting the success criteria goal of 64 percent of coverage comprised of native vernal pool species.

The created pools fell slightly short of the success criteria in two areas. The goal for relative plant cover at completion of the monitoring was set at 84 percent. In year five the created pool now has 81 percent cover. It should be noted, however, that the more recent 1996 ACOE guidelines for vernal pool mitigation projects lowered the goals for relative plant coverage to 30 percent. A second area that fell short of the success criteria was in meeting the goal that 56 percent of the individual plant species be comprised of native vernal pool species. The fifth year of monitoring indicates that only 52 percent of individual plant species in the created pool are native vernal pool species.

The fourth year of aquatic invertebrate sampling revealed that California lindieriella (Lindieriella occidentalis) and tadpole shrimp (Lepidurus packardi) are present at relatively high concentrations within both the created and natural pools. The created pool had a consistently high wildlife use, mostly by waterbirds.

The monitoring results of the Strawberry Creek Enhancement Plan are presented in this report for the first time. Success criteria for this enhancement plan, which was implemented in 1994 by the City of Sacramento Public Works Department, required survival of 23 trees and 56 shrubs at the end of five years. In 1999, we found the survival rate fell short of the success criteria, with only 16 trees and 30 shrubs still alive. However, we observed considerable natural revegetation along Strawberry Creek, with young cottonwoods, Oregon ash, aspen and willows growing on the banks, as well cattails and herbaceous wetland vegetation in the Strawberry Creek channel.
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INTRODUCTION

This report describes vegetation and aquatic resource investigations conducted during the fifth year of mitigation monitoring. This ongoing study follows the construction phases of the implementation of the vernal pool habitat mitigation plan (PAR Environmental Services, Inc., [PAR] 1994) for the Cosumnes River Boulevard/Calvine Road interchange at State Route 99 in Sacramento County, California (Figures 1 and 2). This report describes vegetation establishment in the 2.8-acre vernal pool which was created to mitigate for the loss of 2.24 acres of wetland and vernal pool habitat during the construction of this interchange. Plant cover data was collected from the created vernal pool and the adjacent impacted vernal pool (control pool A) during two monitoring visits in spring 1999 (Figure 3). Photographs of the pools are included in Appendix A. Aquatic resource investigations are presented here as well, and describe the populations of special status aquatic invertebrates in the created and control pools.

This report also describes the results of the Strawberry Creek Enhancement Plan (Mark Thomas & Co., Inc. 1993) that was implemented in 1994 by the City of Sacramento Public Works Department. This is the first year that PAR Environmental Services, Inc. (PAR) has reported on this creek revegetation plan. The purpose of the Strawberry Creek Enhancement Plan was to mitigate for 0.26 acres of impacts to Strawberry Creek with 0.7 acres of native tree and shrub plantings along the creek banks. A total of 29, 15 gallon trees (6 black walnuts, 12 valley oaks, and 11 interior live oaks), and 70 one gallon shrubs (31 toyon, 39 elderberries) were to be planted.

The purpose of constructing a new vernal pool at this site was to create a wetland habitat that replicated the conditions of the wetland sites impacted by the construction. Baseline data were collected from the impacted vernal pool in 1994 to use in assessing the success of the created vernal pool as plant species become established there. The amount of absolute plant cover and the proportion of native vernal pool plant endemics that cover the created vernal pool, in comparison to the baseline data from comparable naturally occurring populations, were used to determine the biological success of the mitigation effort.

The ecology of vernal pools is one in which the native plant habitat varies from year to year depending on the amount and timing of winter rainfall. The variation in plant coverage data collected in the created and control vernal pools from one year to the next is largely a result of climatic variation. In assessing the long-term success of the created vernal pool it is important to emphasize the trends shown in the graphs of absolute plant cover and cover by native vernal pool plant species over time.

According to the U.S. Army Corps of Engineers (ACOE) mitigation and monitoring guidelines (ACOE 1996), vernal pool mitigation projects require at least five years of monitoring, beginning when the construction of the mitigation wetlands is completed. Continual success of the mitigation wetlands, without human intervention, must be demonstrated for three consecutive years.
Figure 1. Project Vicinity
Figure 2. Project Location

PAR ENVIRONMENTAL SERVICES, INC.
Fifth Year Monitoring Report (PAR Ref. No 99-712)
Figure 3. Created and Existing Pools in Project Area
METHODS

Vernal Pool Plant Coverage Data Collection

For the fifth year, plant species were sampled in the created vernal pool using a series of line transects from fixed points (established in 1995) within the pool, and extending across the pool. These transects were set up to cross the full range of microhabitats that exist in the created vernal pool, and have now been used to collect vegetation coverage data for five consecutive years. A 0.5 square meter (m²) quadrat subdivided into 25 ten-centimeter (cm)-square (cm²) subplots was placed at five-meter intervals along the line transects for a total of 42 sampling plots. The statistical reason for choosing this number of sampling plots was described previously (PAR 1994).

In addition, 14 sampling plots were evaluated in the remaining section of the impacted pool (Pool A) as control data.

Each quadrat was assessed for (1) plant species composition, (2) species percent cover (to the nearest five percent), and (3) percent cover of bare soil. A sample data sheet is presented in Appendix B. The surveys occurred on April 24 and May 23, 1999 during the early and active growing period of the native vernal pool plant species in the created pool. The raw data is included in Appendix C. The rainfall pattern experienced in Sacramento in 1999 (slightly below normal winter rainfall amounts) caused the vernal pools to dry out three to four weeks earlier than during the unusually wet winter and spring of 1998.

Created Vernal Pool Vegetation Success Criteria

The development of standard criteria to measure the success of vernal pool mitigation efforts is an ongoing process. The criteria outlined in this report rely on the recommendations made in the draft guidelines set forth by the ACOE in their 1994 report (ACOE 1994).

Vegetation Cover

According to the ACOE draft monitoring guidelines (ACOE 1994), the total vegetative cover for the created vernal pool should equal or exceed the total vegetative cover that existed in the impacted vernal pools. This plant cover value for the existing impacted pools was determined by collecting baseline plant coverage data from the impacted pool in 1994, prior to construction. Based on these guidelines and data collected from the impacted pool in 1994, a goal of 84 percent relative plant cover was recommended after five years of monitoring. Of that 84 percent, 64 percent relative plant cover was to have been comprised of native vernal pool plants after five years (PAR 1994). When preparing the annual monitoring report in years two through five, the total cover value graph was to have indicated progress towards this...
plant cover goal, and, if not, this would have indicated a need for corrective action in the created pool.

In late 1996, this guideline was altered to state that "The total vegetative cover for each created vernal pool must be no less than 30 percent relative cover and 30 percent total species from the Central Valley Vernal Pool Species List (CVVPSL), and within the range found in natural vernal pools" in the ACOE final monitoring guidelines (ACOE 1996).

**Plant Species Composition**

The ACOE draft monitoring guidelines (ACOE 1994) also recommended that the proportion of plant species that are native vernal pool plant species in the created vernal pool should equal or exceed the baseline value found in the impacted pools after five years. In 1994 sampling, this baseline value was determined to be 56 percent of the plant species occurring in the impacted pool. Again, the annual preparation of the graph of native vernal pool plant species composition prepared in years two through five was to have indicated progress towards this standard and, if not, would have indicated a need for remedial action during the monitoring period.

Unlike the 1994 draft guidelines, no goals were specified in the final ACOE guidelines for percent of total plant species in a created vernal pool from the CVVPSL (ACOE 1996).

**Hydrophytic Vegetation**

Both the draft monitoring guidelines (ACOE 1994) and the final created vernal pool monitoring guidelines (ACOE 1996) specify that after five years each created vernal pool must be dominated by hydrophytic vegetation according to the method provided in the ACOE 1987 wetlands delineation manual (ACOE Environmental Laboratory, 1987).

**Aquatic Resources Sampling Methods**

The aquatic resources occurring with the natural vernal pool A and the created vernal pool 1 (see Figure 3) were characterized by sampling for large branchiopods and recording water quality and physical pool parameters (i.e., maximum and average water depth), wildlife use, and surface weather observations described below. Pool A served as a control pool in which the relative success of the created pool, regarding the aquatic resources could be compared.

**Large Branchiopod Sampling**

Surveys for large branchiopods were conducted on February 15 and March 13 and 28, 1999 by Brent Helm of May Consulting Services under permit PRT-795930 of Section 10(a)(1)(A) of the federal Endangered Species Act.
Information regarding large branchiopod composition and relative abundance was derived from 10 semi-quantitative samples taken with a dipnet. Each sample represented approximately 25 liters of water. The sampling procedure entailed the horizontal movement of the dipnet one meter along the bottom of the pool. Samples were taken at roughly equal distance along a transect that bisected the pools in a north-south direction. Large branchiopod species captured were enumerated and the instar stage (growth stage) was determined or in the case of tadpole shrimp the carapace length was measured and the number of cysts, if any, were enumerated.

In addition to large branchiopods, other aquatic invertebrates species and relative abundances were noted. Several strategically placed sweeps with the dipnet were conducted in an attempt to capture less common and more mobile species.

**Water Quality Sampling**

Water quality sampling was conducted concurrent with large branchiopod surveys. Water temperature, oxygen concentration, and pH sample measurements were taken just below the surface waters at the center of each pool. Measurements of water temperature and oxygen concentration were taken with a Yellow Spring Instrument (YSI) and pH measurements with a Whatmans pH meter. An alcohol thermometer was also used to measure temperature. A small (four-inch diameter) secchi disk was used to determine relative turbidity.

**Physical Pool Parameters**

Estimates of the physical pool parameters were conducted concurrent with large branchiopod surveys. The maximum and average depth of the pools were estimated by measuring the depth of the water at one-meter intervals along a transect that bisected the pools in a north-south direction.

The approximate size of control pool A was measured last year during the May 1998 site visit to ensure that this pool had not been adversely affected (in terms of size) by the permanent presence of the widened roadway to the south. The pool is now about 1.6 acres in size, as compared to 1.5 acres of vernal pool acreage that was to remain unimpaired by the construction of the adjacent interchange. It therefore appears that the existing remaining portion of vernal pool A is the same size or larger than before construction.

**Surface Weather Observations**

Surface weather observations (i.e., sky conditions, wind speed and direction, air temperature) were recorded in the field concurrent with large branchiopods surveys. Wind speed and direction were estimated according to the Beaufort scale. Air temperature was measured with an alcohol thermometer at waist height sheltered from the wind.
Wildlife Use

Because of the close proximity of the project site to the home residence of Brent Helm, he was able to observe wildlife use of the pools on two occasions (January 3 and February 8, 1999) in addition to those observations conducted concurrently with large branchiopod surveys. Wildlife surveys were restricted to large vertebrates (mostly waterbirds) using visual observations with the aid of binoculars.

Aquatic Data Statistical Analysis

Field data were recorded on standardized data forms. Data were then entered from field forms into Microsoft® Excel™ spreadsheets. Spreadsheets were then imported into Minitab® statistic software package for analysis. Descriptive statistics for all parameters collected in the fields were generated and the means of these parameters from each pool were tested for significant differences using the nonparametric Mann-Whitney Test. Critical values were \( \alpha = 0.05 \).

Strawberry Creek Tree and Shrub Monitoring

PAR revegetation specialist Carolyn Chaineys-Davis and PAR principal biologist Susan Sanders surveyed the replanting site on September 20, 1999. Using the Plant Records Form (Appendix D) from the Strawberry Creek Enhancement Plan, they measured the condition of each plant with an evaluation of leaf turgor, stem caliper, leaf color, and foliage density. Each of these parameters was assessed as excellent, good, fair, poor, or dead. Height canopy and canopy diameter were also measured for each planting.
VEGETATION RESULTS

Created Vernal Pool Data Collection

Average percent cover was calculated for all plant species in the created vernal pool on each of the two dates of data collection in 1999. Each average was derived from the percent cover data from the 42 quadrats along all of the transects on that particular date. The average percent cover in the created pool for the April and May sampling visits were 105 percent and 119 percent respectively (Appendix C).

The cumulative average percent cover values are shown in Table 1. These averages were derived from the two dates of data collection and are used as a measurement of annual plant cover. The cumulative average for percent vegetation cover was 112 percent. The most common species seen in 1999 were *Convolvulus arvensis*, *Crassula aquatica*, *Lasthenia glaberrima*, *Phyla nodiflora* var. *nodiflora*, and *Plagiobothrys stipitatus*. Three of these plant species are native vernal pool species (*Crassula*, *Lasthenia*, and *Plagiobothrys*). Slightly greater concentrations of plants were seen on higher points and ridges in the created pool than in the lowest elevations of this pool, but this discrepancy in plant distribution has become less pronounced with each passing year.

Percent cover values for the more abundant plant species growing in the created vernal pool are depicted in Figure 4. In this figure it is seen that the native vernal pool plant species *Plagiobothrys stipitatus* has increased in cover to a fairly steady 40 percent cover in the created pool. Other native vernal pool plant species showing steadily increasing coverage in the created pool include *Eryngium vaseyi*, *Lasthenia glaberrima*, and *Psilocarphus tenellus*. The percent of unvegetated ground surface has maintained a downward trend in the created pool since the hydrology of this pool was corrected in 1996.

In Table 1 the data for percent cover of unvegetated soil or bare ground show a cumulative average in the created pool in Year 5 of 19%; a decrease from the 69%, 74%, 33%, and 32% seen in Years 1, 2, 3, and 4 respectively. The value obtained for bare ground presence is used to derive the relative plant cover value. Thus the relative plant cover in the created pool in 1999 was 81%, compared to 31%, 26%, 67%, and 68% in Years 1, 2, 3, and 4 respectively. These results are shown in Figure 5.

The cumulative average plant cover for native vernal pool plant species is important in assessing the progress towards a predominance of native vernal pool plant species in the created vernal pool. In 1999, the cumulative average plant cover was 112.0% in the created vernal pool, as mentioned above. Of this 112.0% plant cover, 73.4% consisted of native vernal pool plant species (Table 1) as found on the ACOE Central Valley vernal pool plant species list (ACOE 1996). Thus 66% (73.4/112) of the total vegetative cover in the created vernal pool was made up of native vernal pool plant species. This compares to 82%, 48%, 77%, and 68% in Years 1, 2, 3, and 4 respectively as shown in Figure 6.
Figure 4 - Representative Plant Species Coverage

- Created Pool 1995
- Created Pool 1996
- Created Pool 1997
- Created Pool 1998
- Created Pool 1999
- Control Pool A 1995
- Control Pool A 1996
- Control Pool A 1997
- Control Pool A 1998
- Control Pool A 1999

Plant Species

Absolvent Plant Cover (%)
# Table 1. Percent Vegetation Cover Averages for the Created Pool

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<td>3.3%</td>
<td>3.3%</td>
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<td>1.1%</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Lythrum hyssopifolium</td>
<td>0.6%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>4.1%</td>
<td>4.1%</td>
<td>4.1%</td>
<td>4.1%</td>
<td>15.6%</td>
<td>15.6%</td>
<td>15.6%</td>
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</tr>
<tr>
<td>Phyla nodiflora var. nodiflora</td>
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<td>0.2%</td>
<td>0.2%</td>
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<td>26.2%</td>
<td>26.2%</td>
<td>26.2%</td>
<td>26.2%</td>
<td>43.4%</td>
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<td>Plagiobothrys stipitatus</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>39.6%</td>
<td>39.6%</td>
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<td>39.6%</td>
</tr>
<tr>
<td>Polygonum arenastrum</td>
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<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
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<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Psilotrichus tenellus</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
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<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
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</tr>
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<td>Veronica peregrina ssp. xal.</td>
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<td>2.1%</td>
<td>2.1%</td>
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<td>2.1%</td>
<td>2.1%</td>
<td>2.1%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Xanthium strumarium</td>
<td>7.1%</td>
<td>7.1%</td>
<td>7.1%</td>
<td>7.1%</td>
<td>2.1%</td>
<td>2.1%</td>
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<td>2.1%</td>
<td>2.1%</td>
<td>2.1%</td>
<td>2.1%</td>
<td>2.1%</td>
</tr>
<tr>
<td><strong>PLANT TOTALS</strong></td>
<td><strong>36.6%</strong></td>
<td><strong>29.9%</strong></td>
<td><strong>32.6%</strong></td>
<td><strong>15.6%</strong></td>
<td><strong>84.4%</strong></td>
<td><strong>64.8%</strong></td>
<td><strong>100.7%</strong></td>
<td><strong>68.5%</strong></td>
<td><strong>112.0%</strong></td>
<td><strong>73.4%</strong></td>
<td><strong>120.7%</strong></td>
<td><strong>81.1%</strong></td>
</tr>
<tr>
<td><strong>Bare Ground</strong></td>
<td><strong>68.5%</strong></td>
<td><strong>74.2%</strong></td>
<td><strong>33.9%</strong></td>
<td><strong>31.7%</strong></td>
<td><strong>31.7%</strong></td>
<td><strong>31.7%</strong></td>
<td><strong>31.7%</strong></td>
<td><strong>31.7%</strong></td>
<td><strong>31.7%</strong></td>
<td><strong>31.7%</strong></td>
<td><strong>31.7%</strong></td>
<td><strong>31.7%</strong></td>
</tr>
</tbody>
</table>
Figure 5 - Total Vegetation Cover

- Created Pool
- Control Pool A
--- Original Success Criteria Goal
— New Success Criteria Goal
Figure 6 - Native Vernal Pool Species Cover

- Created Pool
- Control Pool A
--- Original Success Criteria Goal
- New Success Criteria Goal
In Table 1 it is seen that 21 plant species were found in the created vernal pool in 1999. Eleven of these plant species are considered to be native vernal pool endemics (ACOE 1996). Therefore 52\% of the individual species found in the created pool in 1999 were native vernal pool plant species. This compares to 58\%, 47\%, 52\%, and 61\% in Years 1, 2, 3, and 4 respectively as shown in Figure 4.

Control Vernal Pool "A" Data Collection

Average percent cover also was calculated for all plant species in the remaining portion of the impacted vernal pool (Control Pool A) on each of the two dates of data collection. Each average was derived from the percent cover data from the 14 quadrats along two transects on that particular date. The total vegetative cover for the 1999 April and May sampling visits were 96 percent and 110 percent respectively. In many cases, the total plant coverage in an individual plot adds up to a value greater than 100 percent. This often happens when measuring percent plant cover in a multi-layered habitat. In this case there are species that form a dense cover on the surface of the ground such as *Phyla nodiflora*, while other species provide varying amounts of coverage 4 to 12 inches above the ground.

As shown in Table 2, the cumulative average plant cover for the control pool was 103 percent which is lower than the 125 percent cover seen in this pool during baseline data collection in 1994 (PAR 1994). Figure 1 depicts plant percent cover values for some of the more common plant species found in the created and control vernal pools during the five years of monitoring. This figure depicts the variation in percent cover that can occur for a given plant species from one year to the next in the same vernal pool.

In Table 2 there is also a value for percent cover of unvegetated soil or bare ground in the control pool. The cumulative average for bare ground in the control pool in 1999 was 14\%, as compared to 3\%, 10\%, 3\%, and 10\% in Years 1, 2, 3, and 4 respectively. This means that the relative plant cover in the control pool in 1999 was 86\%, compared to 97\%, 90\%, 97\%, and 90\% in Years 1, 2, 3, and 4 respectively. These results are shown in Figure 5.

A cumulative average plant percent cover for native vernal pool plant species was calculated in the control pool from 1999 sampling data and is shown in Table 2. This value for all plant species was 103.2\%, and 74.9\% cover consisted of native vernal pool plant species as found on the on the ACOE Central Valley vernal pool plant species list (ACOE 1996). Thus 73\% (74.9/103.2) of the total vegetative cover in the control vernal pool was made up of native vernal pool plant species. This compares to 64\%, 74\%, 66\%, 79\%, and 78\% in baseline, Year 1, 2, 3, and 4 data respectively as shown in Figure 6.
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Plant Cover</td>
<td>% Native Plant Cover</td>
<td>Average Plant Cover</td>
<td>% Native Plant Cover</td>
<td>Average Plant Cover</td>
</tr>
<tr>
<td>Alopecurus saccatus</td>
<td>0.9%</td>
<td>0.9%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Callitriche marginata</td>
<td>0.9%</td>
<td>0.9%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Convulvulus arvensis</td>
<td>3.6%</td>
<td>non-native</td>
<td>1.3%</td>
<td>non-native</td>
<td>3.9%</td>
</tr>
<tr>
<td>Crassula aquatica</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Cuscuta howelliana</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Cyperus eragrostis</td>
<td>0%</td>
<td>non-VP</td>
<td>0.4%</td>
<td>non-VP</td>
<td>0.5%</td>
</tr>
<tr>
<td>Downingia bicornuta</td>
<td>4.1%</td>
<td>4.1%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Eleocharis macrostachya</td>
<td>16.4%</td>
<td>16.4%</td>
<td>14.6%</td>
<td>14.6%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Epilobium cleistogamum</td>
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<td>8.0%</td>
<td>8.6%</td>
<td>8.6%</td>
<td>0%</td>
</tr>
<tr>
<td>Eremocarpus setigerus</td>
<td>0%</td>
<td>non-VP</td>
<td>0%</td>
<td>non-VP</td>
<td>0%</td>
</tr>
<tr>
<td>Eryngium vaseyi</td>
<td>25.5%</td>
<td>25.5%</td>
<td>18.8%</td>
<td>18.8%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Gratiola ebracteata</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Juncus xiphioides</td>
<td>2.7%</td>
<td>non-VP</td>
<td>0.5%</td>
<td>non-VP</td>
<td>0%</td>
</tr>
<tr>
<td>Lasthenia fremontii</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Lasthenia glaberrima</td>
<td>24.3%</td>
<td>24.3%</td>
<td>11.1%</td>
<td>11.1%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Lilaea scilloides</td>
<td>0%</td>
<td>0%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0%</td>
</tr>
<tr>
<td>Lolium multiflorum</td>
<td>2.9%</td>
<td>non-native</td>
<td>1.8%</td>
<td>non-native</td>
<td>1.3%</td>
</tr>
<tr>
<td>Lythrum hyssopifolium</td>
<td>2.0%</td>
<td>non-native</td>
<td>0.5%</td>
<td>non-native</td>
<td>0%</td>
</tr>
<tr>
<td>Other species</td>
<td>23.8%</td>
<td>non-VP</td>
<td>28.2%</td>
<td>non-VP</td>
<td>17.7%</td>
</tr>
<tr>
<td>Phyllo nodiflora var. nodiflora</td>
<td>0.2%</td>
<td>0.2%</td>
<td>1.3%</td>
<td>1.3%</td>
<td>0%</td>
</tr>
<tr>
<td>Ptilaria americana</td>
<td>21.4%</td>
<td>21.4%</td>
<td>10.0%</td>
<td>10.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Plagiobothrys stipitatus</td>
<td>0.7%</td>
<td>non-native</td>
<td>5.2%</td>
<td>non-native</td>
<td>1.1%</td>
</tr>
<tr>
<td>Polypogon monspeliensis</td>
<td>5.7%</td>
<td>5.7%</td>
<td>10.5%</td>
<td>10.5%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Psilocarpus tenellus</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Ranunculus bonariensis</td>
<td>0%</td>
<td>0%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>0%</td>
<td>0%</td>
<td>1.4%</td>
<td>1.4%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Veronica peregrina ssp. xal.</td>
<td>0%</td>
<td>non-VP</td>
<td>0%</td>
<td>non-VP</td>
<td>0%</td>
</tr>
<tr>
<td>Xanthium strumarium</td>
<td>1.4%</td>
<td>non-VP</td>
<td>0%</td>
<td>non-VP</td>
<td>0%</td>
</tr>
<tr>
<td>PLANT TOTALS</td>
<td>147.1%</td>
<td>108.6%</td>
<td>120.5%</td>
<td>79.9%</td>
<td>119.5%</td>
</tr>
<tr>
<td>Bare Ground</td>
<td>2.7%</td>
<td>9.8%</td>
<td>2.7%</td>
<td>10.4%</td>
<td>13.6%</td>
</tr>
</tbody>
</table>
Sixteen plant species were found in the control vernal pool in 1999 (Table 2), and seven of these plant species are considered to be native vernal pool endemics (ACOE 1996). Therefore 44% of the individual species found in the control pool in 1999 were native vernal pool plant species, as compared to 56%, 60%, 55%, 59%, and 67% in baseline, Year 1, 2, 3, and 4 data respectively. These results are presented in Figure 7.

The approximate size of control pool A was measured during the late May site visit in 1998 (Year 4) to ensure that this pool had not been adversely affected (in terms of size) by the permanent presence of the widened roadway to the south. The pool was then about 1.6 acres in size as compared to 1.5 acres of vernal pool acreage that was to remain unimpacted by the construction of the adjacent interchange. It appeared that the existing remaining portion of control pool A was thus actually slightly larger than before construction. This situation is unchanged in 1999 (Year 5).

**Hydrology and Soil Monitoring**

Only the lowest portion of control pool A had a very small amount of standing water at the time of the first monitoring visit in late April 1999. Other areas on the surface of the lowest portions of this pool and the created pool were only damp. Examination of the soil in the created pool found that the soil was still wet just below the surface in some areas. Observations made by Brent Helm during and after the rainy season suggest that the created pool continues to pond water for a considerable amount of time. Indirect hydrologic indicators used by the ACOE to determine jurisdictional wetlands were present in many areas of the created pool in the spring. These indicators included sediment deposits (primary indicator) and oxidized rhizospheres, algal mats, and ostracods (secondary indicators). In addition, soil investigations indicated the presence of mottles in the soil, a hydric soil indicator.

**Site Quality Monitoring**

The quality of the site was visually assessed during the two monitoring visits in 1999. Human-related disturbances to the created vernal pool continue to be fairly minimal at this time. There was no evidence of motorized vehicle use within the pool. Some garbage dumping continues at the end of the cul-de-sac adjacent to the south rim of the pool, and some of this material ends up in the pool.

No signs of excessive erosion were evident in the created pool, and the banks of the pool are becoming more vegetated. Livestock and other domestic animals continue to have no apparent impact on the created pool at this time. Drivers continue to believe that the cul-de-sac is not a dead-end road as the road signs indicate, and this will undoubtedly continue indefinitely.
Figure 7 - Plant Species Composition

Vernal Pool Plant Species (% of total species)

Year


- Created Pool
- Control Pool A
- Success Criteria Goal
AQUATIC RESOURCES - RESULTS

Water Quality

Table 3 presents the results of the water quality analysis. No statistical analysis was conducted because of the small sample size (n = 3), but there is no apparent difference in water temperature and pH between the created pool and the natural pool for a given sampling date. However, oxygen concentration and turbidity measurements were slightly greater for the created vernal pool in comparison to the natural pool. The greater turbidity is probably a result of the created pool having a larger surface area exposed to the wind and less emergent plants, thereby allowing a through mixing of water. This is expected given the clayey loam substrate and large fetch of the created pool.

The slightly higher oxygen concentration measurements obtained from the water of the created pool compared to the natural pool may be attributed to the greater mixing potential of the water. Also, the lower density of macrophytes (macroscopic water loving plants) in the created pool would result in less oxygen consumption at night during the respiration process.

The oxygen concentration of the two pools might be more similar if they were sampled later in the day when oxygen is being produced by the photosynthetic organisms instead of during the early morning hours after a night of respiration. Another factor, which may contribute to greater oxygen, is the large volume of water, with a greater specific heat.

Similar to many other internally drained basins, the natural and created vernal pools are slightly alkaline, tending to increase as evaporation and transpiration of water increases.

Large Branchiopod Sampling

Table 4 shows the results of large branchiopod occurrence within the natural and created pool. Table 5 reveals the results of the descriptive statistics. In general, the data indicate that during the 1998-99 monitoring period the created pool supports a significantly higher concentration of *Linderiella occidentalis* in comparison of the natural pool (Table 6). In contrast, there was no significant difference in the concentration of *Lepidurus packardi* between the two pools. Similarly there was no significant difference in the number of cysts per individual of *L. packardi* between the two pools.

Both the created pool and the natural pool supported a moderate diversity of aquatic invertebrates. Similar to other vernal pools in the area, three crustaceans: copepods, ostracods, and cladocerans, dominate in terms of biomass. The greatest difference between the two pools concerning aquatic invertebrates was the richness and abundance. The natural pool had a slightly greater number of invertebrate taxa than the created pool. This may be explained because the natural vernal pool has more emergent vegetation that increases the variety of habitats and niches of aquatic organisms.
Table 3. Wildlife and Surface Weather Observations and Water Quality Data for the Calvine Road and State Route 99 Vernal Pools

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Pool Number</th>
<th>Sky Conditions</th>
<th>Wind Speed (kph) / Dir.</th>
<th>Air Temp (°C)</th>
<th>Oxygen Conc. mg/l</th>
<th>pH</th>
<th>Turbidity</th>
<th>Depth (cm)</th>
<th>Wildlife Use</th>
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<tbody>
<tr>
<td>3-Jan-99</td>
<td>9:00 AM</td>
<td>NP 1</td>
<td>partly cloudy</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>2 M</td>
</tr>
<tr>
<td>3-Jan-99</td>
<td>9:00 AM</td>
<td>CP</td>
<td>partly cloudy</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>4 CE, 1M</td>
</tr>
<tr>
<td>8-Feb-99</td>
<td>8:00 AM</td>
<td>NP 1</td>
<td>partly cloudy</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>1 M, 1 GYL</td>
</tr>
<tr>
<td>8-Feb-99</td>
<td>8:00 AM</td>
<td>CP</td>
<td>partly cloudy</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>2 M, 3 CE,</td>
</tr>
<tr>
<td>15-Feb-99</td>
<td>8:00 AM</td>
<td>NP 1</td>
<td>partly cloudy</td>
<td>5/South</td>
<td>12</td>
<td>11.3</td>
<td>7</td>
<td>1.1</td>
<td>slight</td>
<td>51</td>
</tr>
<tr>
<td>15-Feb-99</td>
<td>9:00 AM</td>
<td>CP</td>
<td>partly cloudy</td>
<td>5/South</td>
<td>12</td>
<td>11</td>
<td>9.7</td>
<td>7.4</td>
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</tr>
<tr>
<td>13-Mar-99</td>
<td>8:00 AM</td>
<td>NP 1</td>
<td>sunny</td>
<td>5/South</td>
<td>14</td>
<td>13.8</td>
<td>6.3</td>
<td>7.6</td>
<td>slight</td>
<td>33</td>
</tr>
<tr>
<td>13-Mar-99</td>
<td>9:00 AM</td>
<td>CP</td>
<td>sunny</td>
<td>5/South</td>
<td>14</td>
<td>13.3</td>
<td>7.2</td>
<td>7.6</td>
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<tr>
<td>28-Mar-99</td>
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<td>5.9</td>
<td>7.9</td>
<td>moderate</td>
<td>16</td>
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</table>

BNS = black necked stilt  
GE = great egret  
M = mallard  
CE = cattle egret  
GLY = greater yellow legs  
CS = common snipe  
K = killdeer

NR = not recorded  
NP = natural pool  
CR = created pool
Table 4. Enumeration of Large Brachiopods Sampled at the Calvine Road and State Route 99 Vernal Pools

<table>
<thead>
<tr>
<th>Sampling Date</th>
<th>Pool Number</th>
<th>Sample Number</th>
<th><strong>Number of Large Brachiopods per 25 L</strong></th>
<th><strong>Linderiella occidentalis</strong></th>
<th><strong>Lepidurus packardi</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Instar Stages</td>
<td>&gt;15</td>
<td>10 to 15</td>
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<td>NP 1</td>
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PAR ENVIRONMENTAL SERVICES, INC.
Calvine Monitoring Report (PAR Ref No. 97-565)
Table 4. Enumeration of Large Brachiopods Sampled at the Calvine Road and State Route 99 Vernal Pools (Continued)

<table>
<thead>
<tr>
<th>Sampling Date</th>
<th>Pool Number</th>
<th>Sample Number</th>
<th>Number of Large Brachiopods per 25 L</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Linderiella occidentalis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Instar Stages</td>
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<tr>
<td></td>
<td></td>
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<td>9</td>
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<td>8</td>
</tr>
<tr>
<td>18-Mar-99</td>
<td>NP 1</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>18-Mar-99</td>
<td>NP 1</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>18-Mar-99</td>
<td>NP 1</td>
<td>8</td>
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<td>NP 1</td>
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<td>NP 1</td>
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</tr>
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<td>CP 4</td>
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<td>23</td>
</tr>
<tr>
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<td>CP 5</td>
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<td>CP 6</td>
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<td>CP 7</td>
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<td>23</td>
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<td>18-Mar-99</td>
<td>CP 8</td>
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</table>

( ) = number of cysts (embryonic eggs) per individual

Table 5. Results of Descriptive Statistics

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<th>Date</th>
<th>Pool No.</th>
<th>Variable</th>
<th>Sample No.</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Median</th>
<th>TrMean</th>
<th>StDev</th>
<th>SEMean</th>
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</thead>
<tbody>
<tr>
<td>15-Feb-99</td>
<td>NP</td>
<td># of LO/25 L</td>
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<td>11</td>
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<td>7.5</td>
<td>7.5</td>
<td>2.547</td>
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<td>CP</td>
<td># of LO/25 L</td>
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<td>0.75</td>
<td>0.789</td>
<td>0.249</td>
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<tr>
<td>15-Feb-99</td>
<td>NP</td>
<td># of LP/25 L</td>
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<td>1.1</td>
<td>1</td>
<td>0.875</td>
<td>1.197</td>
<td>0.379</td>
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<td>CP</td>
<td># of LP/25 L</td>
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<td>1.1</td>
<td>1</td>
<td>0.875</td>
<td>1.287</td>
<td>0.407</td>
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<tr>
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<td>CP</td>
<td># of LP/25 L</td>
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<td>0</td>
<td>4</td>
<td>1.1</td>
<td>1</td>
<td>0.875</td>
<td>1.287</td>
<td>0.407</td>
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<tr>
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<td>NP</td>
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<td>0.875</td>
<td>1.054</td>
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<tr>
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<td>CP</td>
<td># of LP/25 L</td>
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<td>0</td>
<td>4</td>
<td>1.1</td>
<td>1</td>
<td>0.875</td>
<td>1.054</td>
<td>0.333</td>
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<tr>
<td>All dates</td>
<td>NP</td>
<td># of cysts/ LP</td>
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<td>0</td>
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<td>6.07</td>
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<td>2.88</td>
<td>16.14</td>
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<tr>
<td>All dates</td>
<td>CP</td>
<td># of cysts/ LP</td>
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<td>0</td>
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<td>0</td>
<td>5.27</td>
<td>16.58</td>
<td>3.03</td>
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LO = Linderiella occidentalis
LP = Lepidurus packardi
CP = Created Pool
NP = Natural Pool
StDev = Standard deviation from the mean
TrMean = True mean
SEMean = Standard error of the mean
Table 6. Results of Mann-Whitney Tests

<table>
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<th>Date</th>
<th>Variable</th>
<th>P-Value for CP vs. NP</th>
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</thead>
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<tr>
<td>15-Feb-99</td>
<td># of LO/25 L</td>
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<tr>
<td>15-Feb-99</td>
<td># of LP/25 L</td>
<td>0.737</td>
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<tr>
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<td># of LO/25 L</td>
<td>*0.0002</td>
</tr>
<tr>
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<td>*0.0002</td>
</tr>
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<td># of LP/25 L</td>
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<td>All dates</td>
<td># of LO/25 L</td>
<td>*0.0000</td>
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<tr>
<td>All dates</td>
<td># of LP/25 L</td>
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</tr>
<tr>
<td>All dates</td>
<td># of cysts/ LP</td>
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</table>

* highly significant at α = 0.01

LO = *Linderiella occidentalis*
LP = *Lepidurus packardi*

CP = Created Pool
NP = Natural Pool

Hydrology

The created pool is deeper and larger than the natural pool; however, the duration of inundation is roughly the same with the created pool initiating ponding early but drying earlier than the natural pool as well.

Wildlife Use

The created pool had a consistently greater wildlife use (i.e., waterbirds) compared to the natural pool (Table 3). The greater wildlife use may be due to the high concentrations (number of individuals per liter of water) of *Linderiella occidentalis* and cladocerans within the created pool, which attracted waterbirds that feed on these species. The created pool may provide better foraging habitat than the natural pool because the greater ponding depth allows a greater diversity of water birds to use the pool.
STRAWBERRY CREEK ENHANCEMENT PLAN RESULTS

Table 7 summarizes the current condition of the trees and shrubs that were planted along Strawberry Creek in 1994. Surviving trees include three black walnuts (*Juglans hindsii*), seven valley oaks (*Quercus lobata*), five interior live oaks (*Quercus wislizenii*), and one blue oak (*Quercus douglasii*). Four of these surviving trees were in good condition and the remainder in fair or poor condition (see Appendix A for photos). Thirty shrubs have survived at the Strawberry Creek mitigation site, including 13 toyon (*Heteromeles arbutifolia*) and 17 elderberry (*Sambucus mexicana*). Eight of these shrubs were in good condition, with the remaining in fair or poor condition.

The success criteria specified in the Strawberry Creek Enhancement Plan have not been met for these plantings. The 80 percent survival rate at the end of five years would be 23 trees and 30 shrubs, but the measured survival rate in 1999 falls short of this goal. While the plantings failed to meet the required success criteria, we noted that considerable natural revegetation along Strawberry Creek had occurred, with young cottonwoods (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*), willows (*Salix goodingii, S. lasiolepis*), and alder (*Alnus rhombifolia*) growing within the ordinary high water mark on the downstream portion of Strawberry Creek (see Appendix A for photos). Cattails (*Typha latifolia*) and other herbaceous instream vegetation (*Juncus effusus, Polygonum lapathifolium, Epilobium sp, Ludwigia*) were also abundant throughout the creek (see Appendix A for photos).

Table 7. Summary of 1999 Condition of Strawberry Creek Enhancement Plan Plantings

<table>
<thead>
<tr>
<th>Species</th>
<th>No. Specified in Planting Plan</th>
<th>No. Surviving After 5 years to meet success criteria</th>
<th>1999 Condition of Plants</th>
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<tr>
<td></td>
<td></td>
<td>Live</td>
<td>Good</td>
<td>Fair</td>
</tr>
<tr>
<td><strong>TREES</strong></td>
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<td>Walnut</td>
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<td><em>Juglans hindsiana</em></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valley oak</td>
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<td>1</td>
</tr>
<tr>
<td><em>Quercus lobata</em></td>
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<td></td>
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<tr>
<td>Interior live oak</td>
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<td>3</td>
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<tr>
<td><em>Quercus wislizenii</em></td>
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</tr>
<tr>
<td>Blue oak</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><em>Quercus douglasii</em></td>
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<tr>
<td>Tree Total</td>
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<td><strong>SHRUBS</strong></td>
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<tr>
<td>Toyon</td>
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<td>13</td>
<td>7</td>
</tr>
<tr>
<td><em>Heteromeles arbutifolia</em></td>
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<td>Elderberry</td>
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<tr>
<td><em>Sambucus mexicana</em></td>
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<tr>
<td>Shrub Total</td>
<td>69</td>
<td>55</td>
<td>30</td>
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PAR ENVIRONMENTAL SERVICES, INC.
Calvine Monitoring Report (PAR Ref No. 97-565)
DISCUSSION

Vegetation

The results seen in Year 5 monitoring of the created vernal pool suggest that successful creation of a mitigation vernal pool wetland has been achieved. The pool has developed necessary wetland features, and establishment of vernal pool plant species is close to matching the control pool in terms of percent cover and species diversity. The amount of bare ground in the created pool has decreased greatly, from about 69% in Year 1, to 19% in Year 5. The nearly complete vegetation cover in the created pool in 1999 is shown in a photograph in Appendix A. There continues to be some non-native wetland plant species present in the created pool, as well as native, non-vernal pool species. This is particularly evident later in the spring, and is also the case in the control pool. As in Control Pool A, the native, non-vernal pool species *Phyla nodiflora* var. *nodiflora* continues to increase its coverage in the created pool. The control vernal pool continues to exhibit species diversity and coverage comparable to that seen when baseline data were collected in 1994.

The created pool successfully meets all of the three criteria necessary to be considered a jurisdictional wetland. The pool has ponded water for a long period (greater than the necessary 21 days) during the middle and late rainy season for all five years of monitoring. This pattern over the past five years suggests that the jurisdictional wetland hydrologic criteria will continue to be satisfied for this pool in the future. The necessary hydric soil criteria are evident in the form of soil mottles, and this and other soil characters will continue to develop in subsequent years. The vegetation criterion was met this year for the third year in a row. As in 1997 and 1998 (Years 3 and 4), slender popcorn flower (*Plagiobothrys stipitatus*) had greater than 20 percent relative cover, qualifying it as a dominant plant species. Since this plant is classified as obligate hydrophytic vegetation, the created pool has met the jurisdictional wetland hydrophytic vegetation criterion for a third consecutive year.

The vegetation coverage data in Table 1 show that the plants growing in the created vernal pool are mainly native vernal pool plant species. The high values seen for bare ground in 1996 (74%) and 1995 (69%) were reduced to 33% in 1997, 32% in 1998, and 19% in 1999, reflecting the increase in coverage by these species.

Vernal pool plants growing in the created pool included genera that were seeded such as *Epilobium cleistogamum*, *Lasntenia glaberrima*, and *Plagiobothrys stipitatus*, but also included genera that were not directly seeded, like *Alopecurus saccatus*, *Crassula aquatica*, *Downingia bicornuta*, *Eryngium vaseyi*, and *Psilocarphus tenellus*. The presence of the latter genera suggests that the created pool has replicated vernal pool hydrologic conditions, the initial transfer of topsoil provided an inoculation of vernal pool plant species seeds, seeds from other sources have been introduced into the pool by wind or animal vectors, and seeds produced by pioneer species in Years 1, 2 and 3 are spreading and expanding populations in subsequent years.
Evaluation of Vegetation Data with Success Criteria

The original goal for the created pool was to have 84 percent relative plant cover, and 64 percent of that coverage comprised of native vernal pool plant species after five years (PAR 1994). These goals were based on the draft guidelines written by the ACOE for vernal pool mitigation projects (ACOE 1994). The more recent final version of these guidelines (ACOE 1996) lowered these goals to 30 percent relative plant cover and 30 percent of that coverage comprised of native vernal pool plant species. After five years of monitoring, the relative plant cover in the created pool was 81 percent, and 66 percent of this coverage was provided by native vernal pool plant species. As shown in Figure 2, the relative plant cover has nearly reached the original success criteria goal, and far surpassed the less stringent newer goal established by the ACOE for the third consecutive year. The trend shown in the Figure 2 graph indicates higher plant coverage each year. In addition, the percent of relative plant cover provided by native vernal pool plant species in the created pool for Year 5 (66 percent) exceeds the original goal of 64 percent established from baseline data for the third consecutive year (see Figure 3). This measure of success has exceeded the more moderate revised goal of 30 percent for all five years of monitoring.

The third success criterion was that 56 percent of the individual plant species occurring in the created vernal pool be native vernal pool species at the end of five years of monitoring (PAR 1994). This goal was based on the ACOE draft guidelines for vernal pool mitigation projects (ACOE 1994), and this measure of mitigation success was not discussed in the more recent final version of these guidelines (ACOE 1996). As shown in Figure 4, in Year 5, 52 percent of the plant species occurring in the created pool were native vernal pool plant species. This figure is close to the original goal and suggests that vernal pool hydrologic conditions have been successfully established in the created pool. This number is likely to continue to fluctuate above and below the original success criteria goal and never increase greatly unless additional native vernal pool species appear in the created pool in coming years. It is unlikely that non-native and/or non-vernial pool plant species currently present in the created pool will entirely disappear from the pool, as seen by their continued presence in the adjacent control pool (see Figure 4).

The final success criterion for the created vernal pool was for domination by hydrophytic vegetation as classified by the ACOE (PAR 1994). The created pool vegetation does meet this goal. The dominant plant species found in the created pool, slender popcorn flower, is classified as hydrophytic vegetation (Reed 1988). Therefore, the vegetation in the created pool meets the jurisdictional wetland hydrophytic vegetation criterion (Environmental Laboratory 1987).

As indicated through the data presented above, it appears that this created vernal pool has met the five-year monitoring success criteria for this wetland mitigation project.
Aquatic Resources

In general, the created pool supports many features important to wildlife. The deep water allows excellent foraging habitat for many bird species that take advantage of the high biomass of aquatic invertebrates supported by the pool. Both Linderiella occidentalis and Lepidurus packardi populations seem to be maintained at relatively high concentrations within both pools. The “false start” of the created and natural pool witnessed in 1997-98, resulting in very low numbers of Lepidurus packardi, seemed to have a minimum, if any, effect on the Lepidurus packardi population numbers witnessed in 1998-99 monitoring season.

Strawberry Creek Enhancement Plan

Lack of maintenance and monitoring appear to be the main factors responsible for the low survivorship and poor condition of the Strawberry Creek tree and shrub plantings. An irrigation system had been installed with the plantings, and was still present during the 1999 survey, but there was no evidence that it was functioning or had been maintained recently. Even if the irrigation system was working, the watering basins around the trees and shrubs are inadequate to retain the water long enough to saturate the soil. Based on the condition of the dead plants, many of the trees and shrubs seemed to have died within one to two years of planting due to lack of water and to competition with weeds. Trees were not fitted with tree protectors on the trunks, and herbivore damage was apparent on many of the trees. In addition, fungal leaf spot and scales attested to the stressed condition of the plantings, probably due to lack of water. Another factor in the low survivorship of the trees was the use of 15 gallon trees for planting rather than a smaller, more easily transplanted size. Invasions of non-native silver poplar (Populus alba) and peppergrass (Lepidium latifolium) also threaten the riparian plantings.

It was apparent that deviations from the original planting plan had been made, as a blue oak not originally in the plan had been planted, fewer live oaks than specified were planted, and many more valley oaks than originally specified had been planted. Our data suggest that fewer shrubs than were specified were planted (e.g., for toyon). However, we may not have been able to find all the planted shrubs, as many were dead and had left no remains. The trees, on the other hand, were easy to count even if they were dead, as remains were always present and tree stakes marked their location.

While the planting failed to meet success criteria, it should be noted that more wildlife habitat exists on the creek now than pre-project. Considerable natural revegetation of woody riparian species has occurred along the creek, and the instream community is considerably richer than before the project. Appendix A show photos of Strawberry Creek before the project and the 1999 condition of the creek.
RECOMMENDATIONS

Past recommendations have been successful in remedying problems with vegetation establishment in the created vernal pool. The important change made between Year 2 and Year 3 was the elimination of excess water flowing into the created pool from the south side drainage ditch. This reduction in the amount of water flowing into the pool decreased the time the pool is inundated at the end of the rainy season and allowed plant germination and growth earlier in the growing season. This allowed greater vegetative cover to occur in the created pool, and greater seed production in Year 3 helped lead to even greater plant coverage and diversity in Years 4 and 5. The photographs included in Appendix A illustrate these changes.

To maintain the quality of this created habitat and the adjacent preserved control pool there are a few suggestions that can be made. Access from the south along the dead-end frontage road should be restricted further, if possible. The rate of visitation does not seem to lead to many direct impacts to the vernal pool, except for a steady amount of garbage dumping at the end of the road adjacent to the pool. The unimpeded vehicle access could develop into a problem in the near future as new subdivisions are completed just south of this site. Perhaps better "Dead-End" signs could be installed in the area. The installation of "Wetland Study Area" signs in 1997 appeared to eliminate the entry of off-road vehicles into the created pool.
REFERENCES

Mark Thomas & Co., Inc.

PAR Environmental Services, Inc.
1998 Monitoring report for the created vernal pool at the Cosumnes River Boulevard/Calvine Road Interchange at State Route 99, Sacramento County, California. Prepared for City of Sacramento Department of Planning and Development.

1997 Monitoring report for the created vernal pool at the Cosumnes River Boulevard/Calvine Road Interchange at State Route 99, Sacramento County, California. Prepared for City of Sacramento Department of Planning and Development.

1996 Monitoring report for the created vernal pool at the Cosumnes River Boulevard/Calvine Road Interchange at State Route 99, Sacramento County, California. Prepared for City of Sacramento Department of Planning and Development.

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1994 Special-status species monitoring and vernal pool restoration for the Calvine Road/Cosumnes River Boulevard/State Route 99 interchange project, Sacramento County, California. Prepared for City of Sacramento Department of Planning and Development.

Reed, P.B., Jr.

United States Army Corps of Engineers


United States Army Corps of Engineers
1996 Appendix B: Specific habitat mitigation and monitoring guidelines for vernal pools. 20 pp.
APPENDIX A

Project Area Photos
Late season ponding and sparse vegetation coverage at the east end of the created pool - 5/25/96

Early season drying and moderate vegetation cover after hydrologic correction - April 4, 1997
High amount of plant cover seen at east end of created pool on April 24, 1999. Areas of *Lasthenia glaberrima* and *Plagiobothrys stipitatus* are evident.
End of high-flow bypass channel at conform with Strawberry Creek. Looking downstream (west). Bruceville Road in background. Photo taken 1993.

Strawberry Creek approaching proposed confluence with high-flow bypass channel. Looking downstream. Photo taken 1993.
Strawberry Creek looking downstream. Note planted valley oaks in the foreground, either dead or in poor condition, and dense cattails in the creek channel.
Photo taken September 25, 1999.
Strawberry Creek looking downstream at confluence of creek and bypass channel.
Note regeneration of woody riparian and instream vegetation.
Photo taken September 25, 1999.

Strawberry Creek looking downstream near Bruceville Road.
Note regeneration of woody riparian and instream vegetation.
Photo taken September 25, 1999.
APPENDIX B

Sample Plant Coverage Data Form
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APPENDIX C

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APPENDIX D

Plant Record Form for Strawberry Creek Plantings
## Creek Enhancement Plan
### Plant Record Form

**PLANT CHARACTERISTIC**

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**Height**

Feet

**Canopy Diameter**

Feet

**Comments:**

- 
- 
- 

**Tree No.:**

**Shrub No.:**

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## Creek Enhancement Plan
### Plant Record Form

**PLANT CHARACTERISTIC**

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**Height**

Feet

**Canopy Diameter**

Feet

**Comments:**

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**Tree No.:**

**Shrub No.:**

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Memorandum

Date: April 27, 2000

To: File

From: Sandra Starr

RE: RARE PLANT SURVEY FOR COSUMNES RIVER BLVD.

On April 07 and 11, 2000, ECORP Consulting, Inc. biologists, Susan Capell and Sandra Starr, conducted a rare plant survey of the proposed Cosumnes River Blvd. project site. The target species of the survey were Bogg’s Lake hedge-hyssop (Gratiola heterosepala), a California state endangered species, dwarf downingia (Downingia pusilla), a California Native Plant Society (CNPS) List 4 species, Greene’s legenere (Legenere limosa), a federal Species of Concern and a CNPS List 1B species, and Sanford’s arrowhead (Sagittaria sanfordii), also a federal Species of Concern and CNPS List 1B species. Surveys were conducted by walking transects through and around all potential habitat on-site (i.e., vernal pool, seasonal wetland, seasonal marsh, and constructed pond). Plant species and cover values were recorded within a number of representative wetlands on-site. In addition, a cumulative species list was generated for the site while walking transects through the wetlands and intervening upland areas. Neither Bogg’s Lake hedge-hyssop, dwarf downingia, Greene’s legenere, or Sanford’s arrowhead were found within the subject project site. A secondary survey for the presence of Greene’s legenere and Sanford’s arrowhead, as well as a complete survey for the presence of Sacramento Orcutt grass (Orcuttia viscida) and slender Orcutt grass (Orcuttia tenuis) will be conducted between May and June of this season.
Memorandum

Date: June 13, 2000
To: File
From: Sandra Starr

RE: RARE PLANT SURVEY FOR COSUMNES RIVER BLVD.

On June 9, 2000, I conducted a secondary rare plant survey of the proposed Cosumnes River Blvd. project site. The target species of the survey were Sanford’s arrowhead (Sagittaria sanfordii), a federal Species of Concern and California Native Plant Society (CNPS) List 1B species, slender Orcutt grass (Orcuttia tenuis), a federally threatened, California state endangered, and CNPS List 1B plant, and Sacramento Orcutt grass (Orcuttia viscida), a federally endangered, California state endangered, and a CNPS List 1B species. The survey was conducted by walking transects through potential habitat on-site (i.e., seasonal marsh). All other wetland features on-site were too shallow to support any of the above listed species. Plant species and cover values were recorded for the seasonal marsh habitat. Additionally, a cumulative species list was generated for the site while walking transects through the wetlands and intervening upland areas during the April survey. Neither Sanford’s arrowhead, slender Orcutt grass or Sacramento Orcutt grass were found within the subject project site. In addition, Bogg’s Lake hedge-hyssop, dwarf downingia, and Greene’s legenere were not found during the previous field survey.
Appendix G

Phase I Environmental Site Assessment
EARTHTEC LTD.
GEOTECHNICAL ENGINEERS • GEOLOGISTS
GEOENVIRONMENTAL CONSULTANTS

PHASE I ENVIRONMENTAL SITE ASSESSMENT
COLLEGE MARKETPLACE
SWC OF HIGHWAY 99 AND CONSUMNES RIVER BOULEVARD
SACRAMENTO COUNTY, CALIFORNIA
APN: 117-0182-1, -19, -20, -21, -24, -28

EARTHTEC, LTD.
JOB NO. 301044

Prepared for:

CITADEL EQUITIES GROUND
C/O BRIAN NATOV
1512 EUREKA ROAD, SUITE 130
ROSEVILLE, CALIFORNIA 95661

April 26, 2001

Reviewed by:

Ed Hendrick
Principal Consultant, REA 05520
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GOVERNMENTAL AGENCIES' LISTS REVIEW .................................................. 5

CONCLUSIONS/OPINIONS ................................................................................... 6

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INTRODUCTION AND SCOPE OF WORK

In accordance with our contract with Citadel Equities Group, this report presents the results of our Phase I Environmental Site Assessment (hereinafter "PESA") for the properties legally described in Appendix A, hereafter collectively referred to as the subject site. The subject site is a series of parcels located on the southwest corner of the intersection between Highway 99 and Consumes River Boulevard and are currently owned by various entities.

The purpose of our study was to assess the potential for contamination of the subject site utilizing the ASTM E 1527 standard as a guideline. Our scope of work was limited to: (1) conducting a physical reconnaissance of the property and performing a drive-by survey of surrounding lands to identify obvious potential sources of contamination; (2) interviewing the current and former owners of the property to identify potential sources of contamination through the recent past; (3) reviewing historical aerial photographs; (4) reviewing the regulatory agency lists more specifically enumerated under "Governmental Agencies' Lists Reviewed"; and, (5) issuing this report of findings.

This report is intended to serve as a screening device for environmental risk associated with present and past property use. It should be noted that the degree of examination represented by a "Phase I Environmental Site Assessment" is not intended to be used as an exhaustive and comprehensive investigation for every conceivable and possible environmental hazard and EARTHTEC, Ltd. does not so imply.
The proposed commercial development is to be located on a combination of parcels at the southwest corner of Highway 99 and Consumnes River College Boulevard in the City of Elk Grove, California. At the time of our site reconnaissance, the subject property was flat-lying, mostly-undeveloped farmland. The land was almost entirely covered with lush, volunteer grasses and weeds. The soil looked as if it had been tilled in that last few years. There was an abandoned road along that north side of the property, paralleling Consumnes River College Boulevard. Scattered about the property were piles of concrete, 10 feet across and ranging in height from 1 to approximately 3 feet. There were also piles of soil about the same size. Both the soil and the concrete displayed various stages of vegetation overgrowth. At the eastern end of a dead-end road that ran through the property, there were various refuse, including a washer and dryer.

The surrounding properties within the vicinity of the subject site are predominately agricultural, with some residential and commercial land usage.
INTERVIEWS WITH CURRENT AND PREVIOUS PROPERTIES OWNERS

The Citadel Equities Group provided us with the chain of title information. A list of the documents is provided in Appendix D.

The chain of title information covers the years between 1964 and 1998 and is extensive. However, the history of the parcels shows that they were bought and sold separately over the years, apparently for speculation purposes. The aerial photographs (see below) do not indicate any industrial or commercial use of the site.

We were unable to contact any property owners to complete the Environmental Questionnaire (refer to Appendix E). However, we understand that the property has always been undeveloped or agricultural land.

AERIAL PHOTO REVIEW

Black and white aerial photographs were reviewed at the Sacramento Natural Resources Conservation Service field office located in Elk Grove, California. These photos may be used to provide an indication of past land uses on and around the subject site. Coverage included photos taken in 1937, 1957, 1964, 1972, 1984, and 1993.

The 1937 photo shows the subject site and greater surrounding area as almost entirely farmland. The few structures that do exist are agricultural in nature. Highway 99 is visible as a one-lane road, as are Bruceville Road, Calvine Road and Cotton Lane. Union House Creek runs east-west through the subject site. Consumes River College has not yet been built.
The 1957 photo shows expansion of Highway 99 into a multi-lane freeway. Union House Creek appears to have been somewhat contained. There is a general increase in development in the general vicinity of the subject site, but the area still remains mostly agricultural. The subject site is almost entirely farmland with a few related structures situated about the site. The exact nature of these structures is not readily discernable from the photograph, but they are probably ordinary farm building and houses. The nature of the crops on the site is not discernable from the photograph.

The 1964 photo does not show much change over the previous seven years. Only a ghostly shadow of Union House Creek is visible, but whether this is due to land management or simply a manifestation of the season is not readily apparent. The subject site is almost identical to the 1957 photograph.

The 1972 photo shows little to no change except that Consumes River College has been built.

The 1984 photo shows expansion of Highway 99 and the development of tract homes to the immediate east of Consumes River College.

The 1993 photo shows almost no discernable change from the 1984 photo. There is no readily observable change in the subject site.

No areas of grossly discolored or grossly contaminated soils were observed on the photos. There were no observed site indications of stressed or dead vegetation. The photos do not indicate any unknown activities on the property or in the immediate vicinity that would, in our opinion, further increase the potential of contamination of the property by hazardous substances.
GOVERNMENTAL AGENCIES' LISTS REVIEW

Descriptions of governmental agencies' databases which were searched by Vista Environmental Information are contained in the attached Vista "Site Assessment Plus Report" (dated June 12, 2000) - Appendix C. The governmental agencies include the United States Environmental Protection Agency (the "EPA"); the CAL/EPA; California Regional Water Quality Control Board - Central Valley Region (the "RWQCB" or "the Board"); California Integrated Waste Management Board; California Department of Health Services; California Department of Toxic Substances Control; and California Office of Environmental Protection. Hereinafter, the lists of these agencies will be termed "the regulatory agency lists".

There are no NPL (National Priorities List) sites within one mile of the parcel. NPL listings are those requiring remediation under the superfund program and represent the highest priority with respect to contaminated sites.

The research database did not list any environmental hazards in a one-mile radius of the site.

EARTHTEC, Ltd. makes no representation or warranty regarding the accuracy, quality or completeness of any data provided by governmental or other entity used by EARTHTEC, Ltd. in the preparation of this report. No claim is made for the actual existence or nonexistence of toxins at the subject or adjacent sites. In any event, EARTHTEC, Ltd. shall not be responsible for any direct, incidental, indirect or consequential damages including loss of profits incurred by any party.
CONCLUSIONS/OPINIONS

The field reconnaissance of the subject site was negative in regards to the potential of environmental hazards in the vicinity of the site. The aerial photo review did not reveal any potential environmental hazards in the vicinity of the site over the last 50 years and that the subject properties have been agricultural and/or undeveloped land for at least that long. No areas or indicators of gross contamination, were observed from the archive photo review. The regulatory agency list results did not return any listings in regards to environmental hazards on or within the radial vicinity of the site.

Based on the information gained during this phase of investigation, it is our opinion that there is a low potential for contamination of the soils on or groundwater beneath the subject site by hazardous substances that are regulated by the federal, state, or county (chlorinated and/or petroleum hydrocarbons, polychlorinated biphenyls, heavy metals, pesticides and other miscellaneous inorganic and organic contaminants). Further assessment of the subject site is not deemed necessary at this time.
LIMITATIONS

This report has been prepared in accordance with practices generally accepted in the current field of Phase I Environmental Site Assessments. No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this site assessment is intended to reduce but not eliminate uncertainty regarding the existence of recognized environmental conditions in connection with a property, recognizing reasonable limits of time and cost.

The findings of this report are valid as of the report date. Changes in the conditions of the property can occur with site modifications and/or the passage of time. These changes may be due to natural processes or to the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards occur, whether they result from legislation or from the broadening of knowledge. Accordingly, the findings and opinions in this report might be invalidated, wholly or partially, by changes outside of our control.

EARTHTEC, Ltd. warrants that this report was prepared under the supervision of a Registered Environmental Assessor in accordance with professional licensing and regulatory guidelines of the State of California. No other warranty, expressed or implied, is made by EARTHTEC, Ltd.

Thank you for the opportunity to provide our environmental consulting services. If you have any questions regarding contents of this report, then please contact us.

Sincerely;
EARTHTEC, Ltd.

[Signature]
David R. Martinez
Staff Geologist

Reviewed by:

[Signature]
Ed Hendrick, REA 05520
Principal Consultant
APPENDIX A

PHASE I ENVIRONMENTAL SITE ASSESSMENT
COLLEGE MARKETPLACE
SWC OF HIGHWAY 99 AND CONSUMNES RIVER BOULEVARD
SACRAMENTO COUNTY, CALIFORNIA
APN: 117-0182-1, -19, -20, -21, -24, -28

DESCRIPTION OF REAL PROPERTIES

The subject site is the following described real property situated in the County of Sacramento, State of California:

A.P.N.: 117-0182-1, -19, -20, -21, -24, -28
APPENDIX B

PHASE I ENVIRONMENTAL SITE ASSESSMENT
COLLEGE MARKETPLACE
SWC OF HIGHWAY 99 AND CONSUMNES RIVER BOULEVARD
SACRAMENTO COUNTY, CALIFORNIA
APN: 117-0182-1, -19, -20, -21, -24, -28

MAPS AND DIAGRAMS

Figure 1: Assessor's Parcel Map - County of Sacramento
APPENDIX C

PHASE I ENVIRONMENTAL SITE ASSESSMENT
COLLEGE MARKETPLACE
SWC OF HIGHWAY 99 AND CONSUMNES RIVER BOULEVARD
SACRAMENTO COUNTY, CALIFORNIA
APN: 117-0182-1, -19, -20, -21, -24, -28

REGULATORY AGENCY LISTS SEARCHED

Vista Site Assessment Plus Report
## Site Distribution Summary

<table>
<thead>
<tr>
<th>Agency / Database - Type of Records</th>
<th>within 1/8 mile</th>
<th>1/8 to 1/4 mile</th>
<th>1/4 to 1/2 mile</th>
<th>1/2 to 1 mile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A) Databases searched to 1 mile:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US EPA NPL National Priority List</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>US EPA CORRACTS RCRA Corrective Actions (w/o TSD)</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>US EPA TSD RCRA Corrective Actions and associated TSD</td>
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<td>STATE SPL State equivalent priority list</td>
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<tr>
<td><strong>B) Databases searched to 1/2 mile:</strong></td>
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<td></td>
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<tr>
<td>STATE SCL State equivalent CERCLIS list</td>
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<td>0</td>
<td>-</td>
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<td>US EPA CERCLIS / NFRAP Sites currently or formerly under review by US EPA</td>
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<td>0</td>
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<tr>
<td>US EPA TSD RCRA permitted treatment, storage, disposal facilities</td>
<td>0</td>
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<td>0</td>
<td>-</td>
</tr>
<tr>
<td>STATE REG CO LUST Leaking Underground Storage Tanks</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>STATE/ REG/CO SWLF Permitted as solid waste landfills, incinerators, or transfer stations</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>STATE DEED RSTR Sites with deed restrictions</td>
<td>0</td>
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<td>0</td>
<td>-</td>
</tr>
<tr>
<td>STATE CORTESE State index of properties with hazardous waste</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>STATE TOXIC PITS Toxic Pits cleanup facilities</td>
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<tr>
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<td>0</td>
<td>-</td>
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<tr>
<td>STATE SPILLS State spills list</td>
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### Site Distribution Summary

<table>
<thead>
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<th>Agency / Database - Type of Records</th>
<th>within 1/8 mile</th>
<th>1/8 to 1/4 mile</th>
<th>1/4 to 1/2 mile</th>
<th>1/2 to 1 mile</th>
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</thead>
<tbody>
<tr>
<td><strong>C) Databases searched to 1/4 mile:</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>US EPA RCRA Viol</td>
<td>RCRA violations/enforcement actions</td>
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<tr>
<td>US EPA TRIS</td>
<td>Toxic Release Inventory database</td>
<td>0</td>
<td>0</td>
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<tr>
<td>STATE UST/AST</td>
<td>Registered underground or aboveground storage tanks</td>
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<td>3</td>
<td>-</td>
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<td><strong>D) Databases searched to 1/8 mile:</strong></td>
<td></td>
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<td></td>
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<tr>
<td>US EPA ERNS</td>
<td>Emergency Response Notification System of spills</td>
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<tr>
<td>US EPA GNRTR</td>
<td>RCRA registered small or large generators of hazardous waste</td>
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<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

This report meets the ASTM standard E-1527 for standard federal and state government database research in a Phase I environmental site assessment. A (-) indicates a distance not searched because it exceeds these ASTM search parameters.

**LIMITATION OF LIABILITY**

Customer proceeds at its own risk in choosing to rely on VISTA services, in whole or in part, prior to proceeding with any transaction. VISTA cannot be an insurer of the accuracy of the information, errors occurring in conversion of data, or for customer’s use of data. VISTA and its affiliated companies, officers, agents, employees and independent contractors cannot be held liable for accuracy, storage, delivery, loss or expense suffered by customer resulting directly or indirectly from any information provided by VISTA.

**NOTES**

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For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.

Report ID: 385801901
Date of Report: April 10, 2001
Version 2.7
### Site Assessment Plus Report

#### Site Inventory

<table>
<thead>
<tr>
<th>MAP ID</th>
<th>Property and the Adjacent Area (within 1/8 mile)</th>
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<tbody>
<tr>
<td>1</td>
<td>USGS Water Well ID #382710121244201, CA</td>
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<tr>
<td></td>
<td>VISTA ID: 8690725 Distance: 0.08 Mi SE</td>
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<table>
<thead>
<tr>
<th>Sites in the Surrounding Area (within 1/8 - 1/4 mile)</th>
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<tr>
<td>MAP ID</td>
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<tr>
<td>2</td>
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<td>3</td>
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<table>
<thead>
<tr>
<th>Sites in the Surrounding Area (within 1/4 - 1/2 mile)</th>
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<tr>
<td>MAP ID</td>
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</tbody>
</table>

No Records Found

**X** = search criteria; **•** = tag-along (beyond search criteria).
For more information call VISTA Information Solutions, Inc. at 1-800-767-0403.

Report ID: 385801901
Date of Report: April 10, 2001

Page #6
<table>
<thead>
<tr>
<th>MAP ID</th>
<th>SITES IN THE SURROUNDING AREA (within 1/2 - 1 mile)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>VISTA ID</td>
<td>DISTANCE</td>
<td>DIRECTION</td>
<td>CORRACS</td>
<td>TSDD CORRAC</td>
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<tr>
<td></td>
<td>NPL</td>
<td>TSDD</td>
<td>SPL</td>
<td>SCL</td>
<td>CERCLIS/NFRAP</td>
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</tbody>
</table>

No Records Found

X = search criteria; * = tag-along (beyond search criteria).

For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.

Report ID: 385801901  Date of Report: April 10, 2001

Version 2.7
## UNMAPPED SITES

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<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tr>
<td>NPL</td>
<td>CORRACS/TS4 CORRACS</td>
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<td>RCRA VIOL</td>
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<td>VISTA ID</td>
<td></td>
<td>CERCLIS/NFRAP</td>
<td>IRIS</td>
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<td></td>
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<td>TSD</td>
<td>LUST</td>
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<td>SMILE</td>
<td>DEED RSTR</td>
</tr>
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<td></td>
<td></td>
<td>CORRERE</td>
<td>TOXIC PITS</td>
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<td></td>
<td></td>
<td>WATER WELLS</td>
<td>SPILLS</td>
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<td></td>
<td></td>
<td>RCRA VIOL</td>
<td>LIST/AST</td>
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<td>CENTURY EQUIPMENT</td>
<td>65827145</td>
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<tr>
<td>8821 STOCKTON BLVD E</td>
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<td></td>
<td></td>
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<tr>
<td>ELK GROVE, CA 95624</td>
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<tr>
<td>COUNTRYSIDE (GIBSON RANCH)</td>
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<tr>
<td>CALVINE RD.</td>
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<tr>
<td>SACRAMENTO, CA 95823</td>
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<tr>
<td>SACRAMENTO (ROBBINS)</td>
<td>364756</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>S OF SACRAMENTO</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SACRAMENTO, CA 95813</td>
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<tr>
<td>SACRAMENTO RIVER DRIP</td>
<td>6613699</td>
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<tr>
<td>S. DREXLER RD. SACTO. LEVEE</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SACRAMENTO, CA</td>
<td></td>
<td></td>
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<tr>
<td>CITY OF SACRAMENTO COMPOST FACILITY</td>
<td>653049891</td>
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<tr>
<td>20 28TH ST SACRAMENTO</td>
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<tr>
<td>SACRAMENTO, CA 0</td>
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<td>SACRAMENTO-YOLO MOSQUITO VECTOR CONTROL</td>
<td>65302913</td>
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<td>60 ACRE SITE</td>
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<td>SACRAMENTO, CA 0</td>
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<td>14TH AVENUE LANDFILL</td>
<td>65504482</td>
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<tr>
<td>N SIDE OF 14TH AVE; W OF RR TRACKS</td>
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</tr>
<tr>
<td>SACRAMENTO, CA 0</td>
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<td>AUTO WRECKING YARD PROPERTY</td>
<td>65502571</td>
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<tr>
<td>1417</td>
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<tr>
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<tr>
<td>HEALTH WELFARE DATA CENTER SITE</td>
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<td>204 3301</td>
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<tr>
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<td>SACRAMENTO MARINA MARINA DR.</td>
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<td>WDRS GEN ORDER REUSE OF WASTE DISCHARGE</td>
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<td>SACRAMENTO SAN JOAQUIN COS</td>
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<tr>
<td>SACRAMENTO, CA 0</td>
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<td></td>
</tr>
</tbody>
</table>

X = search criteria; * = tag-along (beyond search criteria).
For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.
Report ID: 385801901  Date of Report: April 10, 2001
## Property and the Adjacent Area (within 1/8 mile)

**USGS Water Well ID**: 382710121244201  
**CA**  
**VISTA ID**: 8890125  
**Distance/Direction**: 0.08 MI / SE  
**Plotted as**: Point  
**EPA/Agency ID**: N/A  
**USGS Wells - Federal Drinking Water Sources / SRC# 3**  
**Agency Address**: SAME AS ABOVE  
**Well ID**: 382710121244201  
**Use**: DOMESTIC  
**Depth**: 170.0  
**Latitude**: 38.45277777777777  
**Longitude**: -121.41166666666666  
**Quadrangle Name**: FLORIN  
**Surface Elevation**: 25.00  
**Static Water Level**: 90.00  
**County FIPS**: 6067

## Sites in the Surrounding Area (within 1/8 - 1/4 mile)

**VISTA Address**: VALLEY HI C.O. 7601 SHASTA ELK GROVE, CA 95758  
**VISTA ID**: 4503869  
**Distance/Direction**: 0.19 MI / S  
**Plotted as**: Point  
**STATE UST - State Underground Storage Tank / SRC# 45**  
**Agency Address**: VALLEY HI C.O. 7601 SHASTA ELK GROVE, CA 95624  
**Underground Tanks**: 1  
**Aboveground Tanks**: NOT REPORTED  
**Tanks Removed**: NOT REPORTED  
**VISTA Address**: CITIZENS TELECOM CO OF CA IN 7601 SHASTA AV ELK GROVE, CA 95758  
**VISTA ID**: 65096580  
**Distance/Direction**: 0.19 MI / S  
**Plotted as**: Point  
**County UST - County Underground Storage Tank / SRC# 94**  
**Agency ID**: 154851  
**Certificate Number**: 154851  
**Business Name**: CITIZENS TELECOM CO OF CA IN  
**Site Address**: 7601 SHASTA AV ELK GROVE

---

* VISTA address includes enhanced city and ZIP.  
For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.  
Report ID: 385801901  
Date of Report: April 10, 2001  
Page #9
**SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile) CONT.**

<table>
<thead>
<tr>
<th>Site State:</th>
<th>CA</th>
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<tbody>
<tr>
<td>Site Zip:</td>
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<tr>
<td>Tanks:</td>
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<table>
<thead>
<tr>
<th>VISTA Address*: ALBERT ZAYAS EXCAVATING 7816 SHASTA ELK GROVE, CA 95624</th>
<th>VISTA ID#: 3202533</th>
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</thead>
<tbody>
<tr>
<td>Map ID: 3</td>
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</tr>
<tr>
<td>Distance/Direction: 0.23 MI / SE</td>
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</tr>
<tr>
<td>Plotted as: Point</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATE UST - State Underground Storage Tank / SRC# 45</th>
<th>EPA/Agency ID: N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Address: ALBERT ZAYAS EXCAVATING 7816 SHASTA ELK GROVE, CA 95624</td>
<td></td>
</tr>
<tr>
<td>Underground Tanks: 2</td>
<td></td>
</tr>
<tr>
<td>Aboveground Tanks: NOT REPORTED</td>
<td></td>
</tr>
<tr>
<td>Tanks Removed: NOT REPORTED</td>
<td></td>
</tr>
</tbody>
</table>

**SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile)**

No Records Found

**SITES IN THE SURROUNDING AREA (within 1/2 - 1 mile)**

No Records Found

---

* VISTA address includes enhanced city and ZIP.
For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.
Report ID: 385801901
Date of Report: April 10, 2001
Version 2.7
### UNMAPPED SITES

<table>
<thead>
<tr>
<th>VISTA Address*</th>
<th>SACRAMENTO (ROBBINS) S OF SACRAMENTO</th>
<th>VISTA ID#</th>
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<tbody>
<tr>
<td>SACRAMENTO, CA 95813</td>
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<tr>
<td>NFRAP / SRC# 18</td>
<td>Agency ID</td>
<td>0902480</td>
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</table>

| Agency Address: | SAME AS ABOVE |
| EPA ID: | CAD981622483 |
| Site ID: | 0902480 |
| Financial Management System ID: | 911 |
| EPA Region: | 09 |
| USGS Hydrologic Unit Code: | 18020111 |
| Ownership Type: | PRIVATE |
| Federal Facility Indicator: | NOT A FEDERAL FACILITY |
| NPL Status: | NOT ON THE NPL |
| Hazardous Waste Docket Flag: | NOT ON THE HAZARDOUS WASTEDOCKET |
| Action: | REMOVAL ACTION |
| Action Qualifier: | CLEANED UP |
| Action Lead: | EPA FUNDED-FINANCED |
| Scheduled Start Date: | DECEMBER 31, 1981 |
| Scheduled Completion Date: | DECEMBER 31, 1981 |
| Actual Start Date: | OCTOBER 5, 1981 |
| Actual Completion Date: | DECEMBER 14, 1981 |
| Financial Transaction ID: | 0001 |
| Transaction Type: | DECOMMITMENT |
| Transaction Date: | NOVEMBER 9, 1981 |
| Amount: | $ 6,989.00 |

| Financial Transaction ID: | 0002 |
| Transaction Type: | ACTUAL OBLIGATION |
| Transaction Date: | NOVEMBER 9, 1981 |
| Amount: | $ 6,989.00 |
| Operable Unit ID: | 0 |
| Operable Unit Name: | SITEWIDE |
| Fields Not Reported by the Source | Site Incident Category Description(1), Description(1) |
| Agency for this Site: | |

### VISTA Address* | CITY OF SACRAMENTO COMPOST FACILITY | VISTA ID#: 65504891
| 20 28TH ST SACRAMENTO | SACRAMENTO, CA 0 |
| STATE SWLF - Solid Waste Landfill / SRC# 163 | Agency ID: 717 |

| Agency Address: | SAME AS ABOVE |
| Facility Name: | CITY OF SACRAMENTO COMPOST FACILITY |
| Facility Location: | 20 28TH ST SACRAMENTO |
| Facility City: | SACRAMENTO |
| Facility State: | CA |
| Facility County: | SACRAMENTO |
| SWIS Number: | 34-AA-0184 |

* VISTA address includes enhanced city and ZIP.
For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.
Report ID: 385801901 Date of Report: April 10, 2001
Version 2.7
### UNMAPPED SITES CONT.

<table>
<thead>
<tr>
<th>Waste Types:</th>
<th>GREEN MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Site Capacity:</td>
<td>15000 CUBIC YARDS</td>
</tr>
<tr>
<td>Permitted Total Acreage:</td>
<td>10.00</td>
</tr>
<tr>
<td>Actual Total Acreage:</td>
<td>10.00</td>
</tr>
<tr>
<td>Activity:</td>
<td>COMPOSTING FACILITY (GREEN WASTE)</td>
</tr>
<tr>
<td>Operational Status:</td>
<td>ACTIVE</td>
</tr>
<tr>
<td>Regulatory Status:</td>
<td>PERMITTED</td>
</tr>
<tr>
<td>Inspection Frequency:</td>
<td>MONTHLY</td>
</tr>
<tr>
<td>Fields Not Reported by the Source</td>
<td>Permitted Disposal Acreage(1), Actual Disposal Acreage(1)</td>
</tr>
<tr>
<td>Agency for this Site:</td>
<td></td>
</tr>
</tbody>
</table>

#### VISTA

<table>
<thead>
<tr>
<th>Address*:</th>
<th>SACRAMENTO-YOLO MOSQUITO VECTOR CONTROL 60 ACRE SITE SACRAMENTO, CA 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISTA ID#:</td>
<td>65502913</td>
</tr>
<tr>
<td>EPA/Agency ID#:</td>
<td>N/A</td>
</tr>
<tr>
<td>State Spills / SRC# 147</td>
<td>SAME AS ABOVE</td>
</tr>
<tr>
<td>Facility:</td>
<td>SACRAMENTO-YOLO MOSQUITO VECTOR CONTROL DISTRICT FACILITY</td>
</tr>
<tr>
<td>Address:</td>
<td>60 ACRE SITE</td>
</tr>
<tr>
<td>City:</td>
<td>SACRAMENTO</td>
</tr>
<tr>
<td>County:</td>
<td></td>
</tr>
<tr>
<td>Status:</td>
<td>PHASE I RI</td>
</tr>
<tr>
<td>Pollutants:</td>
<td>TPH - D, DDT, DDT METABOLITES, ENDRIN</td>
</tr>
</tbody>
</table>

#### VISTA

<table>
<thead>
<tr>
<th>Address*:</th>
<th>14TH AVENUE LANDFILL N SIDE OF 14TH AVE; W OF RR TRACKS SACRAMENTO, CA 0</th>
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<tbody>
<tr>
<td>VISTA ID#:</td>
<td>65504482</td>
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<tr>
<td>Agency ID#:</td>
<td>7</td>
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<tr>
<td>State SWLF - Solid Waste Landfill / SRC# 163</td>
<td>SAME AS ABOVE</td>
</tr>
<tr>
<td>Facility Name:</td>
<td>14TH AVENUE LANDFILL</td>
</tr>
<tr>
<td>Facility Location:</td>
<td>N SIDE OF 14TH AVE; W OF RR TRACKS</td>
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<tr>
<td>Facility City:</td>
<td>SACRAMENTO</td>
</tr>
<tr>
<td>Facility State:</td>
<td>CA</td>
</tr>
<tr>
<td>Facility County:</td>
<td>SACRAMENTO</td>
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<tr>
<td>SWIS Number:</td>
<td>34-AA-0016</td>
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<td>Activity:</td>
<td>SOLID WASTE DISPOSAL SITE</td>
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<tr>
<td>Operational Status:</td>
<td>CLOSED</td>
</tr>
<tr>
<td>Regulatory Status:</td>
<td>PRE-REGULATIONS</td>
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<td>Inspection Frequency:</td>
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<tr>
<td>Fields Not Reported by the Source</td>
<td>Waste Types(1), Surrounding Land(1), Report Facility Information Date(1), Permitted Peak Throughput(1), Actual Peak Throughput(1), Permitted Site Capacity(1), Actual Site Capacity(1), Permitted Total Acreage(1), Actual Total Acreage(1), Permitted Disposal Acreage(1), Actual Disposal Acreage(1)</td>
</tr>
<tr>
<td>Agency for this Site:</td>
<td></td>
</tr>
</tbody>
</table>
## UNMAPPED SITES CONT.

<table>
<thead>
<tr>
<th>VISTA Address*</th>
<th>AUTO WRECKING YARD PROPERTY</th>
<th>VISTA ID#</th>
<th>65502571</th>
</tr>
</thead>
<tbody>
<tr>
<td>1417 SACRAMENTO, CA 0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### State Spills / SRC# 147
- **Agency Address:** SAME AS ABOVE
- **Facility:** AUTO WRECKING YARD PROPERTY
- **Address:** 1417
- **City:** SACRAMENTO
- **County:** SACRAMENTO
- **Status:** PA
- **Pollutants:** PCB, HG, Ni, Cu, Cr, Cd, Pb, As, Zn
- **Fields Not Reported by the Source Agency for this Site:** Lead(1)

### VISTA Address*
- **HEALTH WELFARE DATA CENTER SITE 204**
- **3301 SACRAMENTO, CA 0**

### State Spills / SRC# 147
- **Agency Address:** SAME AS ABOVE
- **Facility:** HEALTH WELFARE DATA CENTER SITE 204
- **Address:** 3301
- **City:** SACRAMENTO
- **County:** SACRAMENTO
- **Status:** CLOSED BY COUNTY
- **Pollutants:** TPH
- **Fields Not Reported by the Source Agency for this Site:** Lead(1)

### VISTA Address*
- **WDRS GEN ORDER REUSE OF WASTE DISCHARGE**
- **SACRAMENTO SAN JOAQUIN COS**
- **SACRAMENTO, CA 0**

### STATE SWLF - Solid Waste Landfill / SRC# 163
- **Agency Address:** SAME AS ABOVE
- **Facility Name:** WDRS GEN ORDER REUSE OF WASTE DISCHARGE
- **Facility Location:** SACRAMENTO SAN JOAQUIN COS
- **Facility City:** SACRAMENTO
- **Facility State:** CA
- **Facility County:** SACRAMENTO
- **SWIS Number:** 34-AA-0187
- **Activity:** LAND APPLICATION
- **Operational Status:** PLANNED
- **Regulatory Status:** PROPOSED
- **Inspection Frequency:** NONE
- **Fields Not Reported by the Source Agency for this Site:** Waste Types(1), Surrounding Land(1), Report Facility Information Date(1), Permitted Peak Throughput(1), Actual Peak Throughput(1), Permitted Site Capacity(1), Actual Site Capacity(1), Permitted Total Acreage(1), Actual Total Acreage(1), Permitted Disposal Acreage(1), Actual Disposal Acreage(1)
# SITE ASSESSMENT PLUS REPORT

## DESCRIPTION OF DATABASES SEARCHED

### A) DATABASES SEARCHED TO 1 MILE

**NPL**

**SRC#: 19**

VISTA conducts a database search to identify all sites within 1 mile of your property. The agency release date for National Priorities List was December, 2000.

The NPL Report is the US EPA's registry of the nation's worst uncontrolled or abandoned hazardous waste sites. NPL sites are targeted for possible long-term remedial action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980.

**SPL**

**SRC#: 113**

VISTA conducts a database search to identify all sites within 1 mile of your property. The agency release date for CalSites Database was October, 2000.

This database is provided by the Cal. Environmental Protection Agency, Dept. of Toxic Substances Control. The agency may be contacted at: 916-323-3400.

**CORRACTS**

**SRC#: 14**

VISTA conducts a database search to identify all sites within 1 mile of your property. The agency release date for RCRIS Corrective Action Sites was June, 2000.

The CORRACTS database contains information concerning RCRA facilities that have conducted, or are currently conducting a corrective action. A Corrective Action Order is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may also be imposed as a requirement of receiving and maintaining a TSDF permit.

**RCRIS-TSDC**

**SRC#: 556**

VISTA conducts a database search to identify all sites within 1 mile of your property. The agency release date for RCRIS TSDs Subject to Corrective Action was June, 2000.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA TSDCs are treatment, storage and/or disposal facilities that are subject to corrective action under RCRA.
B) DATABASES SEARCHED TO 1/2 MILE

CERCLIS
SRC#: 17

VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Comprehensive Environmental Response, Compensation and Liability Information Sys was December, 2000.

The CERCLIS database is a comprehensive listing of known or suspected uncontrolled or abandoned hazardous waste sites. These sites have either been investigated, or are currently under investigation by the U.S. EPA for the release, or threatened release of hazardous substances. Once a site is placed in CERCLIS, it may be subjected to several levels of review and evaluation, and ultimately placed on the National Priorities List (NPL).

NFRAP
SRC#: 18

VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for No Further Remedial Action Planned was December, 2000.

The No Further Remedial Action Planned Report (NFRAP), also known as the CERCLIS Archive, contains information pertaining to sites which have been removed from the U.S. EPA’s CERCLIS database. NFRAP sites may be sites where, following an initial investigation, either no contamination was found, contamination was removed quickly without need for the site to be placed on the NPL, or the contamination was not serious enough to require federal Superfund action or NPL consideration.

SCL
SRC#: 112

VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for CalSites Database was October, 2000.

This database is provided by the Department of Toxic Substances Control. Two-thirds of these sites have been classified, based on available information, as needing “No Further Action” (NFA) by the Department of Toxic Substances Control. The remaining sites are in various stages of review and remediation to determine if a problem exists at the site. Several hundred sites have been remediated and are considered certified. Some of these sites may be in long term operation and maintenance.

RCRIS-TSD
SRC#: 12

VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for RCRIS Treatment, Storage and Disposal Facilities was June, 2000.

The EPA’s Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA TSDs are facilities which treat, store and/or dispose of hazardous waste.

SWLF
SRC#: 23

VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for USGS Solid Waste Landfills was December, 1991.

This database is provided by the United States Geological Survey. The agency may be contacted at: 703-648-5613.
SWLF
SRC#: 163
VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Solid Waste Inventory System was January, 2001.

This database is provided by the Integrated Waste Management Board. The agency may be contacted at: 916-255-4021.

SWLF-CO
SRC#: 70
VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for City of Los Angeles Landfills Transfer Stations was April, 1999.

This database is provided by the City of Los Angeles, Environmental Affairs Department. The agency may be contacted at: 213-580-1070.

WMUDS
SRC#: 68
VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Waste Management Unit Data System was February, 1999.

This database is provided by the State Water Resources Control Board. The agency may be contacted at: 530-892-0323. This is used for program tracking and inventory of waste management units. This system contains information from: Facility, Waste Management Unit, SWAT Program and Report Summary Information, Chapter 15 (formerly Subchapter 15), TPCA and RCRA Program Information, Closure Information; also some information from the WDS (Waste Discharge System).

SPILLS
SRC#: 147
VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Region 5 SLIC/DOD/DOE Site List was September, 2000.

This database is provided by the Regional Water Quality Control Board, Region #5. The agency may be contacted at: 916-255-3000.

LUST
SRC#: 164
VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Leaking Underground Storage Tank Information System was October, 2000.

This database is provided by the California Environmental Protection Agency. The agency may be contacted at: 916-341-5740.

LUST-REG
SRC#: 108
VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for Region 6 Leaking Underground Storage Tanks was February, 2000.

This database is provided by the Lahontan Region Six South Lake Tahoe. The agency may be contacted at: 530-542-5400.
LUST-REG
SRC#: 145

VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Region 5 Leaking Underground Storage Tanks was January, 2001.

This database is provided by the Regional Water Quality Control Board, Region #5. The agency may be contacted at: 916-255-3125.

CORTES
SRC#: 53

VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Cortese List - Hazardous Waste Substance Site List was April, 1998.

This database is provided by the Office of Environmental Protection, Office of Hazardous Materials. The agency may be contacted at: 916-445-6532. The California Governor’s Office of Planning and Research annually publishes a listing of potential and confirmed hazardous waste sites throughout the State of California under Government Code Section 65962.5. This database (CORTES) is based on input from the following: (1) CALSITES-Department of Toxic Substances Control, Abandoned Sites Program Information Systems; (2) SARA Title III Section III Toxic Chemicals Release Inventory for 1987, 1988, 1989, and 1990; (3) FINDS; (4) HWIS-Department of Toxic Substances Control, Hazardous Waste Information System. Vista has not included one time generator facilities from Cortese in our database.; (5) SWRCB-State Water Resources Control Board; (6) SWIS-Integrated Waste Management Control Board (solid waste facilities); (7) AGT25-Air Resources Board, dischargers of greater than 25 tons of criteria pollutants to the air; (8) A1025-Air Resources Board, dischargers of greater than 10 and less than 5 tons of criteria pollutants to the air; (9) LTANK-SWRCB Leaking Underground Storage Tanks; (10) UTANK-SWRCB Underground tanks reported to the SWEPS systems; (11) IUR-Inventory Update Rule (Chemical Manufacturers); (12) WB-LF- Waste Board - Leaking Facility, site has known migration; (13) WDSE-Waste Discharge System - Enforcement Action; (14) DTSCD-Department of Toxic Substance Control Docket.

BORDER-ZON
SRC#: 46

VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Deed Restriction Properties Report was April, 1994.

The Deeds Restrictions list, also known as the Border Zone Property List, contains information concerning voluntary deed restriction. These agreements are made with owners of property who propose building residences, schools, hospitals, or day care centers on property that is on or within 2,000 feet of potentially hazardous waste site.

TOXICPITS
SRC#: 49

VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Toxic Pits was February, 1995.

This database is provided by the Water Quality Control Board, Division of Loans Grants. The agency may be contacted at: 916-227-4396.
<table>
<thead>
<tr>
<th>Database</th>
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<tbody>
<tr>
<td>USGS-WELLS</td>
<td>VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for USGS Water Wells was March, 1998.</td>
</tr>
<tr>
<td>RCRIS-VIOL</td>
<td>VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for RCRIS Facilities with Violations was June, 2000.</td>
</tr>
<tr>
<td>UST</td>
<td>VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for Underground Storage Tanks was January, 1994.</td>
</tr>
<tr>
<td>UST-CO-SAC</td>
<td>VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for Sacramento County Underground Storage Tanks was January, 2000.</td>
</tr>
<tr>
<td>AST</td>
<td>VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for Aboveground Storage Tanks was December, 1999.</td>
</tr>
</tbody>
</table>

The Ground Water Site Inventory (GWSI) database was provided by the United States Geological Survey (USGS). The database contains information for over 1,000,000 wells and other sources of groundwater which the USGS has studied, used or documented during research.

The Resource Conservation and Recovery Act Information System (RCRIS) identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRIS Violations report contains information concerning facilities that have been cited for violations of RCRA, as well as any enforcement actions taken against the facility.

This historical database is provided by the State Water Resources Control Board, Office of Underground Storage Tanks. Please refer to the local level UST list for more current information. Be advised that some states do not require registration of heating oil tanks, especially those used for residential purposes.

This database is provided by the County of Sacramento Environmental Management Department. The agency may be contacted at: 916-876-8580. Be advised: Many states do not require registration of heating oil tanks, especially those used for residential purposes.
VISTA conducts a database search to identify all sites within 1/4 mile of your property.
The agency release date for Toxic Release Inventory System was January, 1998.

All facilities that manufacture, process, or import toxic chemicals in quantities in excess of 25,000 pounds per year are required to register with the EPA under Section 313 of the Superfund Amendments and Reauthorization Act (SARA Title III) of 1986. Data contained in the TRIS system covers approximately 20,000 sites and 75,000 chemical releases.

D) DATABASES SEARCHED TO 1/8 MILE

ERNS
SRC#: 8
VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for Emergency Response Notification System was December, 1999.

ERNS is a national computer database system that is used to store information on the sudden and/or accidental release of hazardous substances, including petroleum, into the environment. The ERNS reporting system contains preliminary information on specific releases, including the spill location, the substance released, and the responsible party.

RCRA-LQG
SRC#: 16
VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for RCRIS Large Quantity Generators was June, 2000.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Large Generators are facilities which generate at least 1000 kg./month of non-acutely hazardous waste (or 1 kg./month of acutely hazardous waste).

RCRIS-SQG
SRC#: 15
VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for RCRIS Small Quantity Generators was June, 2000.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Small Quantity Generators are facilities which generate less than 1000 kg./month of non-acutely hazardous waste.

End of Report
APPENDIX D

PHASE I ENVIRONMENTAL SITE ASSESSMENT
COLLEGE MARKETPLACE
SWC OF HIGHWAY 99 AND CONSUMNES RIVER BOULEVARD
SACRAMENTO COUNTY, CALIFORNIA
APN: 117-0182-1, -19, -20, -21, -24, -28

CHAIN OF TITLE INFORMATION
ANN ROSE GIENE, formerly ANN ROSE MASONICH, a married woman dealing with her separate property, and MARIE FRANCES EVANOVIĆ, an unmarried woman.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
Do hereby Grant To ALLEN H. GALEREAH and PEARL O. GALEREAH, his wife, as Joint Tenants, as to an undivided one-half interest thereof; and JOHN P. WHISENHUNT and GENETTE H. WHISENHUNT, his wife, as Joint Tenants, as to an undivided one-half interest thereof; in and to the real property in the County of Sacramento, State of California, described as follows:

All that portion of Lots 8 and 9 as shown on the official "Plat of Hewitt Subdivision No. 4," recorded in the office of the County Recorder of Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 53, described as follows:

Beginning at a point in the line between Lots 7 and 8 of said Subdivision, distant South 89° 58' West 561.0 feet from the Northwest corner of said Lot 8, said point of beginning also being in the center line of Duluth Avenue; running thence South 20° 24' East 667.1 feet to a point on the South line of Lot 9 which is distant South 89° 58' West 96.2 feet from the Northwest corner of Lot 10 of said Subdivision; thence along the South line of said Lot 9 South 89° 58' West 1081.11 feet to the West line of said Lot 9; thence North 625.44 feet to the Northwest corner of said Lot 8; thence along the center line of Duluth Avenue North 89° 58' East 848.56 feet to the place of beginning, containing 13.85 acres, more or less.

Dated: March 5, 1964

STATE OF CALIFORNIA
COUNTY OF
Sacramento

On March 6, 1964.

Before me, the undersigned, a Notary Public in and for said County and State, personally appeared
ANN ROSE GIENE, formerly ANN ROSE MASONICH,

known to me to be the person whose name is subscribed to the within instrument and acknowledged that she executed the same.

R. B. HIBBITT
NOTARY PUBLIC
SACRAMENTO COUNTY, CALIFORNIA

Notary Baker, Los Angeles County, April 22, 1965.
STATE OF HAWAII
County of HONOLULU

INDIVIDUAL ACKNOWLEDGEMENT

On this 5th day of MARCH, 1965, before me personally appeared

RAELE FRANCES EVANGEL

to me known to be the person(s) described in and who executed the foregoing instrument, and acknowledged that she executed the same as her free act and deed.

Notary Public, First Judicial Circuit, State of Hawaii

RUTH K. WONG

My commission expires Nov. 15, 1966

$2.80
GRANT DEED

ANN ROSE GIEBE, formerly ANN ROSE MASONICH, a married woman dealing
with her separate property, and MARIE FRANCES EVANOVICH, an unmarried
woman,

(Grantor - Grantors)

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Hereby Grant To ALLEN B. GALEBREATH and PEARL G. GALEBREATH, his
wife, as Joint Tenants, as to an undivided one-half interest thereof;
and JOHN F. WHISENLENT and CHERITE R. WHISENLENT, his wife, as Joint
Tenants, as to an undivided one-half interest thereof; and in and to
the real property in the
County of
Sacramento
State of California, described as follows:

All that portion of Lots 8 and 9 as shown on the official
"Plat of Hewitt Subdivision No. 4," recorded in the office
of the County Recorder of Sacramento County, January 24,
1914, in Book 14 of Maps, Map No. 35, described as follows:

Beginning at a point in the line between Lots 7 and 8 of said
Subdivision, distant South 89° 58' West 561.0 feet from the
Northwest corner of said Lot 8, said point of beginning also
being in the center line of Duluth Avenue; running thence
South 20° 24' East 667.1 feet to a point on the South line of
Lot 9 which is distant South 89° 58' West 96.2 feet from the
Northeast corner of Lot 10 of said Subdivision; thence along
the South line of said Lot 9 South 89° 58' West 1081.11 feet
to the West line of said Lot 9; thence North 62° 44' East to
the Northwest corner of said Lot 9; thence along the center
line of Duluth Avenue North 89° 58' East 848.56 feet to the
place of beginning, containing 13.85 acres, more or less.

Date: March 5, 1964

STATE OF CALIFORNIA
COUNTY OF
Sacramento

On March 6, 1964,

before me, the undersigned, a Notary Public in and for
said County and the State of California, personally appeared
ANN ROSE GIEBE, formerly ANN
ROSE MASONICH,

known to me to be the person(s) whose name(s) is (are)
subscribed to the within instrument and acknowledged that
the same was executed by said person(s).

[Signature]
(Notary signature line)

R. E. HARRITT
("His name and title") Notary Public
("as required by Statute")
Sacramento County, California

Re: Recorde to correct name of first
Grantor.

(Ex. 8559 - Government Code 1959)

L-1 (C.F.) 7-1986 (Rev. 7-88) (3 pk)
STATE OF HAWAI'I
County of HONOLULU

On this 5th day of MARCH, 1964, before me personally appeared

MARIE FRANCES EYAMOVICH

to me known to be the person(s) described in and who executed the foregoing instrument, and acknowledged

that she executed the same as her free act and deed.

GUILL K. WONG
Notary Public, FIRST Judicial Circuit, State of Hawaii

My commission expires Nov. 13, 1966

$2.80

STATE OF CALIFORNIA
COUNTY OF Sacramento

On April 30, 1964, before me, the undersigned, a Notary Public in and for said State, personally appeared Marie Frances Evanovich, formerly Ann Ross Glava, formerly Ann Ross Masonich

known to me

to be the person(s) whose name(s) are subscribed

to the within instrument and acknowledged that they

executed the same.

WITNESS my hand and official seal.

Deanha Dumpy

Name (Typed or Printed)

DEANHA DUMPHY
NOTARY PUBLIC — CALIFORNIA
PRINCIPAL OFFICE IN SACRAMENTO COUNTY

OFFICIAL RECORDS
RECORDED AT REQUEST OF TITLE INSURANCE AND TRUST COMPANY

APR 30 1964 1:30 P.M.

$2.80
EXHIBIT "A"

Beginning at a point on the South line of Section 14, Township 7 North, Range 5 East, where said South line is intersected by the center line of the Upper Stockton Road, so-called; said point of intersection being further located as 2607 feet Westerly from the one quarter section corner common to said Section 14 and Section 23, said Township and Range; thence from said point of beginning North 20° 57' West along the center line of said Upper Stockton Road 1136 feet; thence South 88° 38-1/2' West 667.2 feet to an iron pipe marking the Southeast corner of Lot 9 of Hewitt Subdivision No. 4 as shown on the official plat thereof filed for record in the County Recorder's Office of Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55; thence continuing South 88° 38-1/2' West and along the South line of said Lot 9, 461 feet to an iron pipe marking the Northeast corner of Lot 10 of said Hewitt Subdivision No. 4; thence South 9° 49' East along the Easterly lines of Lots 10, 11 and 12 of said Subdivision, 1059.5 feet to an iron pipe marking the Southeast corner of Lot 12 of said Subdivision; thence North 89° 34' East 1353.3 feet along fence line and the South line of Sections 15 and 14, said Township and Range, to point of beginning.

EXCEPTING THEREFROM the following:

Beginning at a point on the South line of Section 14, in said Township and Range where said South line is intersected by the center line of the Upper Stockton Road, so-called; said point of intersection being further located as 2607 feet Westerly from the one-quarter section corner common to said Section 14 and Section 23, in said Township and Range; thence from said point of beginning South 89° 34' West 1353.5 feet along the South line of said Section 15 to the Southeast corner of Lot 12 as shown on the official "Plat of Hewitt Subdivision No. 4," recorded in the office of the County Recorder of Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55; thence North 9° 49' West 205 feet along the Easterly line of said Lot 12; thence North 89° 34' East 1311.1 feet to a point in the center line of the said Upper Stockton Road and thence South 20° 57' East 216.3 feet along said center line to the point of beginning.
Grant Deed

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

EDWIN A. BECKER and EDITH E. BECKER, his wife,

hereby GRANT(S) to

C&A INVESTMENTS, LTD., a California Corporation,

the following described real property in the County of Sacramento, State of California:

Lot 11, as shown on the official "Plan of Hewitt Subdivision No. 4," filed in the office of the County Recorder of Sacramento County on January 28, 1914, in Book 14 of Plats, Map No. 26.

THENCE: Beginning at the northeast corner of said lot 11, said corner being a point on the center line of a County road known as Hewitt Avenue; thence, from said point of beginning, along the north line of said lot 11, 260 feet; thence, south, and parallel with the east line of said lot 11, 140 feet; thence, west, and parallel with the south line of said lot 11, 260 feet; thence, north, parallel with the west line of said lot 11, 140 feet; thence, south, and parallel with the north line of said lot 11, 260 feet; thence, east, along the center line and the west line of said County Road; thence, along the east line of said lot 11, north 140 feet; thence, west, to the point of beginning. ALL FURTHER EXCEPTING therefrom any portion thereof, included in any road.

Dated January 26, 1945

EDWIN A. BECKER

EDITH E. BECKER

WITNESS: [signature]

[Signature]

Till Order No. 233425 KJ
STATE OF CALIFORNIA
COUNTY OF Sacramento

On February 8, 1965, before me, the undersigned, a Notary Public in and for said State, personally appeared _______ Gerald L. Storz _______ personally known to me to be the person whose name is subscribed to the within instrument, as a Witness thereto, who being by me duly sworn, deposes and says:

That he resides in Sacramento, California, and that he was present and saw Edwin F. Becker & Edith F. Becker, personally known to him, to be the same person described in and whose names are subscribed to the within and annexed instrument as

he acknowledged to said affiant that they executed the same, and that said affiant subscribed his name thereto as a Witness.

WITNESS my hand and official seal.

Signature: __________________________
Name: Harriet Bremer
Date: 10/7/67

$2.80
Corporation Grant Deed

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

CAN-AM INVESTMENTS, LTD., a California corporation,

a corporation organized under the laws of the State of California

hereby GRANTS to

LLOYD CZOBEREK and BEVERLY CZOBEREK, his wife, as joint tenants,

the following described real property in the

County of Sacramento, State of California:

Lot 11, as shown on the official "Plat of Hewitt Subdivision No. 4", filed in
the office of the County Recorder of Sacramento County, January 24, 1914, in
Book 14 of Maps, Map No. 55.

EXCEPTING THEREFROM; Beginning at the Northwest corner of said Lot 11, said
corner being a point on the centerline of a County Road known as Hewitt Avenue;
thence from said point of beginning, along the North line of said Lot 11 East
260 feet; thence, South, and parallel with the West line of said Lot 11, 140
feet; thence, West, and parallel with the North line of said Lot 11, 260 feet
to a point on the centerline of said County Road; thence along said center-
line and the West line of said Lot 11, North 140 feet to the point of
beginning. AND FURTHER EXCEPTING THEREFROM any portion thereof, included
in any road.

In Witness Whereof, said corporation has caused its corporate name and seal to be affixed hereto and this
instrument to be executed by its

President and Secretary thereto duly authorized.

Dated: January 10, 1966

STATE OF CALIFORNIA

COUNTY OF Sacramento SS.

before me, the undersigned, a Notary Public in and for said County and State, personally
appeared E. H. Cleve, known to me to be

G. H. Bassi, known to me to be

Secretary of the Corporation that executed the
within instrument, known to me to be the person who executed the
within instrument as agent for the Corporation however named, and
was present and did execute the within instrument as a resolution of its board of directors.

WITNESS my hand and official seal.

(Seal)

Name (Typed or Printed)

Notary Public in and for said County and State

Title Order No. 242956-AP

Escrow or Loan No.

$2.00
GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

- JACK HUNT HEALY and MARGARET S. HEALY, his wife

...do hereby

GRANT to JACK HUNT HEALY and MARGARET S. HEALY, his wife, as Tenants In Common

the real property in the

County of Sacramento,

State of California, described as:

PARCEL NO. 1- LOT 10 as shown on the Official "Plat of Hewitt Subdivision No. 4", recorded in the office of the County Recorder of said Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55, EXCEPT the West 40 feet located in Hewitt Avenue.

PARCEL NO. 2- THAT Portion of Lots 8 and 9 as shown on the official "Plat of Hewitt Subdivision No. 4", recorded in the office of the County Recorder of said Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55 Described as:

COMMENCING at an iron pipe marking the Southeast corner of said Lot 9 and running thence South 88° 36' West 61.0 feet to an iron pipe marking the Northeast corner of Lot 10 of said Subdivision; thence South 89° 58' West along the division line between said Lots 9 and 10, a distance of 96.2 feet; thence North 20° 28' West 667.1 feet to the North line of said Lot 8; said line being the center of Duluth Avenue; thence North 89° 58' East along the center line of said Avenue, 56.0 feet to the Northeast corner of said Lot 8; thence South 20° 28' East along the East line of said Lots 8 and 9 to the place of beginning, containing 8 acres more or less.

Date: February 7, 1966

[Signature]

MARGARET L. HEALY

STATE OF CALIFORNIA
COUNTY OF
San Francisco

On February 8, 1966

before me, the undersigned, a Notary Public in and for said State, personally appeared Jack Hunt Healy and Margaret S. Healy

known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

John H. Cokley

Notary Public
CITY AND COUNTY OF
SAN FRANCISCO

[Stamp] (This area for official seal and stamp)

MAIN TAX STATEMENTS TO Jack Hunt Healy and Margaret S. Healy

Address

Zip Code
FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

LLOYD CZOBERK

hereby REMISE(S), RC. "CASE(S) AND FOREVER QUITCLAIM(S) to

BEVERLY CZOBERK, as her sole and separate property

the following described real property in the

state of California:

Lot 11, as shown on the official "Plan of Hewitt Subdivision No. 4", filed in the office of the County Recorder of Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55.

EXCEPTING THEREFROM; Beginning at the Northwest corner of said Lot 11, said corner being a point on the centerline of a County Road known as Hewitt Avenue; thence from said point of beginning, along the North line of said Lot 11 East 260 feet; thence, South, and parallel with the West line of said Lot 11, 140 feet; thence, West, and parallel with the North line of said Lot 11, 260 feet to a point on the centerline of said County Road; thence, along said centerline and the West line of said Lot 11, North 140 feet to the point of beginning. AND FURTHER EXCEPTING THEREFROM any portion thereof, included in any road.

Dated Nov. 27, 1967

LLOYD CZOBERK

STATE OF CALIFORNIA
COUNTY OF SACRAMENTO
On November 27, 1967 before me, the undersigned, a Notary Public in and for said State, personally appeared

LLOYD CZOBERK

to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same.

WITNESS my hand and official seal.

Signature

JACK LEE BURFORD

NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN SACRAMENTO COUNTY

Name (Typed or Printed):

Title Order No.

Exem or Loan No.

REVISED EXEMPTIONS FORM NO. N-70
(Revised as of Industrial Development Bonds, 1970)
QUITCLAIM DEED

IN CONSIDERATION of One Dollar receipt of which is hereby acknowledged,

JACK HUNT HEALY AND MARGARET S. HEALY, his wife,

do hereby REMISE, RELEASE AND FOREVER QUITCLAIM to

JOHN HUNT HEALY, their son, a single man

all that real property in the
State of California, described as:

Parcel No. 1, Lot 18 as shown on official "Plat of Hewitt Subdivision No. 4", recorded in the office of the County Recorder of said Sacramento County, January 24, 1914 in Book 14 of maps, map number 55, EXCEPT the west 40 feet located in Hewitt Avenue.

Parcel No. 2, That portion of lots 8 and 9 as shown on the official "Plat of Hewitt Subdivision No. 4", recorded in the office of the County Recorder of said Sacramento County, January 24, 1914, in book 14 of maps, number 55 described as:

Commencing at an iron pipe marking the southeast corner of said lot 9 and running thence south 89° 36' west 461.0 feet to an iron pipe marking the northeast corner of the lot 10 of said Subdivision; thence south 89° 36' west along the dividing line between said lots 9 and 10, a distance of 96.2 feet; thence north 20° 24' 3 feet west 669.1 feet, to the North line of said lot 8; said line being the center of Duluth Avenue; thence North 89° 46' 37" feet east along the center line of said Avenue, 669.1 feet to the north east corner of said lot 8; thence south 20° 24' 3 feet east along the east line of said lots 8 and 9 to the place of beginning, containing eight acres more or less.

Date: May 20, 1957

STATE OF CALIFORNIA
COUNTY OF
San Francisco

On May 20, 1957 before me, the undersigned, a Notary Public in and for said County and State, personally appeared

Jack Hunt Healy and Margaret S. Healy

known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

Witness my hand and official seal.

Helen Dawson
Notary Public
City & Co of San Francisco

Order No.

HELEN DAWSON
Notary Public
City & Co of San Francisco
My Commission Expires August 3, 1969
Grant Deed

The undersigned grantor(s) declare(s):

Documentary transfer tax is $136.40

XX computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at time of sale.
( ) Unincorporated area: ( ) City of

The undersigned grantor(s) declare(s):

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

JOHN HUNT HEALY and MARY ANNE HEALY, his wife

hereby GRANT(S) to

CHARLES R. GORDON and JANET A. GORDON, his wife, as Joint Tenants

the following described real property in the

County of Sacramento, State of California:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Dated April 24, 1978

John Hunt Healy

Mary Anne Healy

STATE OF CALIFORNIA
COUNTY OF SACRAMENTO

On this 24th day of April, 1978, before me, the undersigned, a Notary Public in and for said State, personally appeared

John Hunt Healy

Mary Anne Healy

known to me to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

Signature

Name (Typed or Printed)

Form No. 22

MAIL TAX STATEMENTS AS DIRECTED ABOVE

(Handwritten notarization and signatures)
EXHIBIT "A"

PARCEL NO. 1:
Lot 10, as shown on the "Plat of Hewitt Subdivision No. 4", recorded in Book 14 of Maps, Map No. 55, records of said County.

EXCEPT the West 40 feet located in Hewitt Avenue.

PARCEL NO. 2:
That portion of Lots 8 and 9, as shown on the "Plat of Hewitt Subdivision No. 4", recorded in Book 14 of Maps, Map No. 55, records of said County, described as follows:

COMMENCING at an iron pipe marking the Southeast corner of said Lot 9 and running thence South 89° 38' West 461.0 feet to an iron pipe marking the Northeast corner of the Lot 10 of said subdivision; thence South 89° 58' West along the division line between said Lots 9 and 10, a distance of 26.2 feet; thence North 20° 24' West 667.1 feet, to the North line of said Lot 8; said line being the center of Duluth Avenue; thence North 89° 58' East along the center line of said Avenue, 561.0 feet to the Northeast corner of said Lot 8; thence South 20° 24' East along the East line of said Lot 8 and 9 to the place of beginning.

EXCEPTING AND RESERVING unto the grantees herein an undivided 1/2 interest in all oil, gas, asphaltum minerals and other hydrocarbon substances in or on said land, below a depth of 500 feet from the surface of said land, together with the right to produce, explore, develop and extract said substances but without, however, the right of surface entry on the surface of said land or within said 500 feet from the surface thereof.
RECORDING REQUESTED BY:

WHEN RECORDED MAIL TO:
De Novo & De Novo
1022 Mendocino Ave
Santa Rosa, Cal. 95401

MAIL TAX STATEMENT TO:
ABOVE

GRANT DEED

In consideration of the sum of Two Hundred Twenty Thousand Dollars ($220,000.00), receipt of which is hereby acknowledged, I, EDNA GENELLE LARSON, as executor of the Estate of LOUISE B. REDDICK, Deceased, pursuant to the Order of the Superior Court of the State of California in and for the County of Sacramento, made in the matter of the Estate of LOUISE B. REDDICK, Deceased, Probate Proceeding Number 69108, on January 3, 1979, confirming the sale of real estate and directing the execution of a conveyance, a certified copy of which is recorded with this deed, hereby grants to ROBERT L. DUPRE'T and FRANCES B. DUPRE'T, as community property, as to an undivided one-half, and ARTHUR A. DAMEKAS, a single man, as to an undivided one-half, all right, title, interest and estate of the decedent at the time of her death and all right, title and interest that the estate may have subsequently acquired by operation of law or otherwise in and to the real property situate in the County of Sacramento, State of California, described as follows:

Beginning at a point on the South line of Section 14, Township 7 North, Range 5 East, where said South line is intersected by the center line of the Upper Stockton Road, so called; said point of intersection being
further located as 2607 feet Westerly from the
one quarter section corner common to said
Section 14 and Section 23, said Township and
Range; thence from said point of beginning
North 20° 57' West along the center line of
said Upper Stockton Road 1136 feet; thence
South 88° 38-1/2' West 667.2 feet to an iron
pipe marking the Southeast corner of Lot 9 of
Hewitt Subdivision No. 4 as shown on the official
plat thereof filed for record in the County
Recorder's Office of Sacramento County, January
24, 1914, in Book 14 of Maps, Map No. 55;
thence continuing South 88° 38-1/2' West and
along the South line of said Lot 9, 461 feet
to an iron pipe marking the Northeast corner
of Lot 10 of said Hewitt Subdivision No. 4;
thence South 9° 49' East along the Easterly
lines of Lots 10, 11 and 12 of said Subdivision,
1059.5 feet to an iron pipe marking the South-
theast corner of Lot 12 of said Subdivision;
thence North 89° 34' East 1353.3 feet along fence
line and the South line of Sections 15 and 14,
said Township and Range, to point of beginning,
EXCEPTING THEREFROM the following:
Beginning at a point on the South line of
Section 14, in said Township and Range where
said South line is intersected by the center
line of the Upper Stockton Road, so-called;
said point of intersection being further located
as 2607 feet Westerly from the one-quarter
section corner common to said Section 14 and
Section 23, in said Township and Range; thence
from said point of beginning South 89° 34'
Westerly 1353.5 feet along the South line of said
Section 15 to the Southeast corner of Lot 12
as shown on the official "Plat of Hewitt Sub-
division No. 4," recorded in the office of
the County Recorder of Sacramento County,
January 24, 1914, in Book 14 of Maps, Map No.
55; thence North 3° 49' West 205 feet along
the Easterly line of said Lot 12; thence North
89° 34' East 1311.1 feet to a point in the
center line of the said Upper Stockton Road and
thence South 20° 57' East 216.3 feet along
said center line to the point of beginning.

DATED: 12/29/78

Edna Genelle Larran, Executor
of the Estate of Louise B.
Reddick, Deceased

///
ACKNOWLEDGMENT

STATE OF CALIFORNIA )
COUNTY OF SACRAMENTO ) ss.

On this 24th day of December, 1978,

before me, the undersigned, a Notary Public in and for the said
County and State, duly commissioned and sworn, personally appeared
EDNA GENELLE LARSON, as Executor of the Estate of LOUISE B. REDDICK,
Deceased, known to me to be the person whose signature is sub-
scribed to the within instrument, and acknowledged to me that she
executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this Certificate
first above written.

[Signature]
Notary Public
State of California
My Commission Expires:
July 29, 1980
GRANT DEED

We, ROBERT L. DUPRET and FRANCES B. DUPRET, husband and wife and ARTHUR A. DANEKAS, a single man, grant to SEA VIEW LUMBER COMPANY, INC., a California corporation all that real property situated in the County of Sacramento, State of California, described as follows:

See Exhibit "A" attached hereto.

Executed and delivered on MARCH 2nd, 1979.

ROBERT L. DUPRET
FRANCES B. DUPRET
ARTHUR A. DANEKAS

State of California, County of Sacramento:

On MARCH 2nd, 1979, before me, the undersigned, a Notary Public in and for the said County and State, personally appeared, ROBERT L. DUPRET, FRANCES B. DUPRET, and ARTHUR A. DANEKAS, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

Notary Public

Mail Tax Statements to:
Sea View Lumber Company, Inc.
3996 Piner Road
Santa Rosa, California
State of California, County of Sonoma:

On March 2, 1979, before me, the undersigned a Notary Public in and for said State, with principal office in said County personally appeared, FRANCES B. DUPRETT known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same.

[Signature]
Notary Public
EXHIBIT "A"

All that portion of the Southeast 1/4 of Section 15, Township 7 North, Range 5 East, M. D. B. & M., described as follows:

Beginning at a point in the center line of the Upper Stockton Road, so called, from the one-quarter section corner common to Section 14 and Section 23, Township 7 North, Range 5 East, bears South 20° 57' East along the center line of said Upper Stockton Road, 216.3 feet to the South line of Section 14, and East along the South line of Section 14, a distance of 2607.00 feet; thence from said point of beginning, North 20° 57' West along the center line of said Upper Stockton Road a distance of 910.7 feet; thence South 88° 38 1/2' West a distance of 667.2 feet to an iron pipe marking the Southeast corner of Lot 9 of Hewitt Subdivision No. 4, as shown on the official plat thereof, filed for record in the County Recorder's Office of Sacramento County, California, on January 24, 1914, in Book 14 of Maps, Map No. 55; thence continuing South 88° 38 1/2' West and along the South line of said Lot 9, a distance of 461.00 feet to an iron pipe marking the Northeast corner of Lot 10 of said Hewitt Subdivision No. 4; thence South 9° 49' East along the Easterly lines of Lots 10, 11 and 12 of said subdivision, a distance of 854.5 feet to the Northwest corner of property conveyed by Virgil K. Reddick and wife, to Walter Thompson, by deed dated March 2, 1946, recorded in Book 1215 of Official Records, page 397; thence North 89° 34' East along the North line of property conveyed to Walter Thompson, a distance of 1311.1 feet to the point of beginning.

EXCEPTING THEREFROM all that portion of the above described property lying Easterly from a line described as follows:

BEGINNING at a point distant N. 36° 40' 38" W. 139.12 feet from the monument in the Westerly line of the existing State Highway Right of Way distant S. 55° 34' W. 46.27 feet from Engineer's Station 392+00 as per Sheet 16 of 32 of the Official Layout Sheets, Road X-Sac-4-B, approved April 11, 1937, filed May 8, 1934, in State Highway Map Book No. 1, Records of Sacramento County, said monument also being the point of beginning of that certain Deed dated October 25, 1950, recorded January 4, 1951 in Book 1951 at Page 50 Official Records of Sacramento County, THENCE from said point of beginning S. 20° 43' 46" E. 1918.55 feet.

A.P. NO. 117-182-18
FOR VALUE RECEIVED, CHARLES L. GORDON AND JANET A. GORDON, husband and wife,

GRANT to SEA VIEW LUMBER CO., INC., A CALIFORNIA CORPORATION,

all the real property described in the

County of Sacramento,

LEGAL DESCRIPTION ATTACHED HERETO...

APX. 117-182-02

Dated: October 16, 1979

Charles L. Gordon

STATE OF CALIFORNIA

On this day of October, 1979, before me, the undersigned,

Notary Public in and for said State, personally appeared

CHARLES L. GORDON and JANET A. GORDON

known to me to be the persons whose names appear

subscribed to the within instrument, and acknowledged to me that

they executed the same.

Rudine L. May

Notary Public

MAIL TAX STATEMENTS AS DIRECTED ABOVE
That portion of Lots 8 and 9, of Easton Subdivision No. 4, according to the official Plat thereof, filed in the office of the Recorder of Sacramento County, California, on January 24, 1914, in Book 14 of Maps, Map No. 53, records of said County, described as follows:

COMMENCING at an iron pipe marking the Southeast corner of said Lot 9 and running thence South 89° 38' West 461.0 feet to an iron pipe marking the Northeast corner of Lot 10 of said subdivision, thence South 89° 38' West along the division line between said Lots 9 and 10, a distance of 96.2 feet, thence North 20° 24' West 667.1 feet, to the North line of said Lot 8; said line being North 20° 24' West and East along the center line of said Avenue 561.0 feet to the Northeast corner of said Lot 8; thence South 20° 24' East along the East line of said Lots 8 and 9 to the place of beginning.

EXCEPTING THEREFROM an undivided 1/2 interest in all oil, gas, asphaltum minerals and other hydrocarbon substances in or on said land, below a depth of 500 feet from the surface of said land, together with the right to produce, explore, develop and extract said substances but without, however the right of surface entry on the surface of said land or within said 500 feet from the surface thereof as reserved in the deed from John Kent Healy and Mary Jane Healy, his wife to Charles R. Gordon and Janet A. Gordon, his wife, as joint tenants, dated April 24, 1978, recorded May 5, 1978, in Book 780505 O. R., Page 1413.

RESERVING UNTO GRANTOR HERSELF an undivided 1/2 interest in all oil, gas, asphaltum minerals and other hydrocarbon substances in or on said land, below a depth of 500 feet from the surface of said land, together with the right to produce, explore, develop and extract said substances but without, however the right of surface entry on the surface of said land or within said 500 feet from the surface thereof.
Individul Grant Deed
WESTERN TITLE FORM NO. 104

FOR VALUE RECEIVED, ROBERT L. DUPRET and FRANCES B. DUPRET, husband and wife and ARTHUR A. DAKAS, a single man

GRANT to SEA VIEW LUMBER COMPANY, INC., a California corporation

all that real property situate in the
County of Sacramento

, State of California, described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF.

Dated February 2, 1981

Robert L. Dupret                                  Frances B. Dupret
Artur A. Dakas

STATE OF CALIFORNIA

On February 2, 1981, before me, the undersigned,
a Notary Public, in and for said State, personally appeared

ARTHUR A. DANKAS

known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that
he executed the same.

John F. DeMio
Notary Public

FOR NOTARY SEAL OR STAMP

OFFICIAL SEAL
JOHN F. DE MIO
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN SONOMA COUNTY
My Commission Expires: June 21, 1982
State of California, County of Sonoma:

On February 13, 1981, before me the undersigned, a Notary Public in and for said State, personally appeared ROBERT L. DUPRET and FRANCES B. DUPRET, known to me to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same.

[Signature]
NOTARY PUBLIC

[Seal]

[Seal Details]
Quit Claim Deed

PEARL O. GALBREATH, an unmarried woman,

does quit claim unto

ALLAN H. GALBREATH, an unmarried man, as his sole and separate property

all that real property situate in the City of Sacramento County of Sacramento

State of California, described as follows:

All that portion of Lots 8 and 9 as shown on the official "Plat of Hewitt Subdivision No. 4," recorded in the office of the County Recorder of Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55, described as follows:

Beginning at a point in the line between Lots 7 and 8 of said subdivision distant South 89° 58' West 561.0 feet from the Northwest corner of said Lot 8, said point of beginning also being in the center line of Duluth Avenue; running thence South 20° 24' East 667.1 feet to a point on the South line of Lot 9 which is distant South 89° 58' West 96.2 feet from the Northeast corner of Lot 10 of said Subdivision; thence along the South line of Lot 10, South 89° 58' West 1081.11 feet to the West line of said Northwest corner of said Lot 8; thence along the center line of Duluth Avenue North 89° 58' East 848.56 feet to the place of beginning, containing 13.85 acres, more or less.

EXCEPT AND RESERVING unto the Grantor as a mineral interest and as a royalty interest all oil, gas, hydrocarbons, minerals, valuable metals, and associated substances in, under or produced and saved from said real property together with the right to produce, develop, explore and extract said substances APN 117-181-11

Dated  Aug 31  1981

[Signature]

PEARL O. GALBREATH

STATE OF CALIFORNIA

County of SACRAMENTO

On August 31, 1981, before me, the undersigned a Notary Public in and for said State, personally appeared

PEARL GALBREATH

Known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that the same was executed by him.

[Signature]

Val Barnes

Notary Public

FOR NOTARY SEAL OR STAMP
QUITCLAIM DEED

By this instrument dated September 1, 1982, for a valuable consideration, PEARL O. GALBREATH

the following described Real Property in the County of SACRAMENTO,

City of SACRAMENTO

All that portion of Lots 8 and 9 as shown on the official "Plat of Hewitt Subdivision No. 4" recorded in the office of the County Recorder of Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55 described as follows:

Beginning at a point in the line between Lots 7 and 8 of said subdivision distant South 89 degrees 58 feet West 561.0 feet from the Northwest corner of said Lot 8, said point of beginning also being in the center line of Duluth Avenue; running thence South 20 feet 24 feet East 667.1 feet to a point on the South line of Lot 9 which is distant South 89 degrees 58 feet West 96.2 feet from the Northeast corner of Lot 10 of said Subdivision; thence along the South line of said Lot 9, South 89 degrees 58 feet West 1081.11 feet to the West line of said Northwest corner of said Lot 8; thence along the center line of Duluth Avenue North 89 degrees 58 feet East 648.66 feet to the place of beginning, containing 13.55 acres, more or less.

EXCEPT AND RESERVING unto Grantor and Grantee as tenants in common as a mineral interest and as a royalty interest in all oil, gas, hydrocarbons, minerals, valuable metals, and associated substances in, under or produced and saved from said real property, together with the right to produce, develop, explore, and extract said substances.

PEARL O. GALBREATH

STATE OF CALIFORNIA

COUNTY OF SACRAMENTO

Recorded on October 11, 1982, before me, the undersigned, a Notary Public in and for said County and State, personally appeared, PEARL O. GALBREATH, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same.

MAIL TAX STATEMENTS AS DIRECTED ABOVE.
AFFIDAVIT—DEATH OF JOINT TENANT

STATE OF CALIFORNIA,

County of Sacramento

Janet A. Gordon, of legal age, being first duly sworn, deposes and says:

That CHARLES ROY GORDON

is the same person as

CHARLES R. GORDON,

dated April 24, 1978

executed by JOHN HUNT HEALY AND MARY ANNE HEALY

to CHARLES R. GORDON and JANET A. GORDON, husband and wife

as joint tenants, recorded as Instrument No. 67464,

in book 78-05-03, page 1429, of Official Records of Sacramento

County, California, covering the following described property situated in the

County of Sacramento, State of California:

Lot 10 of Hewitt Subdivision No. 4, according to the official plat

thereof, filed in the Sacramento County Recorder's office on

January 24, 1914, in Book 14 of Maps, Map No. 55.

EXCEPTING THEREFROM the West 40 feet located in Hewitt Avenue.

ALSO EXCEPTING THEREFROM an undivided 1/2 interest in all oil, gas,

asphaltum, minerals and other hydrocarbon substances in or on said

land, below a depth of 500 feet from the surface of said land, together

with the right to produce, explore, develop and extract said sub-

stances, but without, however, the right of surface entry on the

surface of said land or within said 500 feet from the surface thereof,

as reserved by John Hunt Healy and Mary Anne Healy, his wife, by


Dated April 29, 1985

JANET A. GORDON

SUBSCRIBED AND SWORN TO before me, the

undersigned, a Notary Public in and for said County

and State, this 29th day

of April, 1985.

(Seal)

STAN WALLIS

NOTARY PUBLIC

FLAVERS COUNTY

My Commission Ex. Oct. 22, 19°
THIS IS TO CERTIFY THAT IF BEARING THE SEAL OF THE SACRAMENTO COUNTY HEALTH OFFICER, THIS IS A TRUE COPY OF A RECORD ON FILE IN THE VITAL STATISTICS SECTION, SACRAMENTO COUNTY DEPARTMENT OF HEALTH, SACRAMENTO, CALIFORNIA.

Paul J. Kim, M.D.  
Registrar

Counsel York  
Deputy
NOW, THEREFORE, in consideration of the foregoing premises and other
good and valuable consideration, the receipt of which is hereby ac-
knowledged, and in consideration of the mutual premises of the Parties
hereto, the Parties hereto do hereby mutually convenant and agree as
follows:

1. The Transferee does hereby assume and agree to pay the
principal sum of the indebtedness evidenced by the Note and secured by
said Deed of Trust, reduced as of October 7th, 1991, to the
principal sum of $89,000.00

Together with interest at the rate of 9.5000 % per annum, in accordance with the terms of said Note and Deed of
Trust, or as said terms may from time to time be modified or changed,
with the same force and effect as if the said instruments had origin-
ally been executed by them.

2. The Association does not by this Assumption Agreement re-
lieve and release the Transferor of and from any liability or obliga-
tion to make the payments provided for pursuant to the terms of the
said Note and Deed of Trust referred to above. At such time that 5
years from the Assumption Agreement recording date has elapsed, the
Transferor will then be released from liability. It is expressly un-
derstood and agreed by the Parties hereto that this Agreement shall
not be deemed to be or construed to as released of the debt nor shall
anything herein contained in any manner of form impair the validity
of the lien of said Note and Deed of Trust.

There are no offsets or defenses to the said Note and Deed of
Trust or to the amount of the debt as hereinbefore set forth.

Except as modified by this Agreement, all the provisions of
said Note and Deed of Trust are and shall remain in full force and
effect and are and shall be performed by the Transferee.

This Agreement shall be binding upon and inure to the benefit
of the Parties hereto, their legal representatives, heirs, adminis-
trators, executors, successors and assigns.

IN WITNESS WHEREOF, the Parties hereto have hereunto affixed
their signatures the day and year in this Agreement first above writ-
ten.

[Signatures]

TRANSFEROR(S)

[Signatures]

TRANSFEREE(S)

FIRST CALIFORNIA MORTGAGE COMPANY

By

Byron J. Roener, Assistant Vice President
Grant Deed

The undersigned grantor(s) declare(s):

Documentary transfer tax is $ 681.00

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

BEVERLY COBROSEK, as her sole and separate property and
ARTHUR A. DANEKAS, an unmarried man

hereby GRANT(S) to

MAJORITY INVESTMENTS, INC., a California corporation

the tract(s) in

Sacramento County State of California, described

as Lot 11, as shown on the "Plat of Hewitt Subdivision No. 4", recorded in Book 14
of Maps, Map No. 55, records of said County.

EXCEPTING THEREFROM: Beginning at the Northwest corner of said Lot 11, said corner
being a point on the centerline of a County Road known as Hewitt Avenue; thence
from said point of beginning, along the North line of said Lot 11 East 260 feet;
thence, south and parallel with the West line of said Lot 11, 140 feet; thence
West and parallel with the North line of said Lot 11, 260 feet to a point on the
centerline of said County Road; thence, along said centerline and the West line
of said Lot 11, North 140 feet to the point of beginning. AND FURTHER EXCEPTING
THEREFROM any portion thereof, included in any road.

RESERVING THEREFROM all minerals, oil, gas and other hydrocarbons substances lying
below a depth of 500 feet from the surface of said land without the right of surface
entry.

Date: July 5, 1985

STATE OF CALIFORNIA
COUNTY OF Sacramento
On July 5, 1985, before me, the undersigned Notary Public in and for said State personally appeared
Arthur A. Danekas, Beverley Colesnek

SWORN TO AND SUBSCRIBED before me, to be the persons whose names are subscribed to
the within instrument and acknowledged that they executed the same.

Signature: Arthur A. Danekas

Mail tax statements to: Beverley Colesnek

Mail Tax Statements as Directed Above

CHRIS L. DEAN
S iral PUBLIC
RACENT COUNTY, CALIFORNIA
My Commission Expires April 7, 1989
THE COURTH FINDS

2. a. All notices required by law have been given.
   b. Decedent died on date: April 26, 1985
   c. XX a resident of the California county named above
   d. XX a resident of California and left an estate in the county named above
   e. XXX intestate

THE COURT FURTHER FINDS AND ORDERS

3. a. XX The property described in attachment 3b is property passing to (name):
     The surviving spouse, and no administration of it is necessary.
   b. See attachment 3b for further order respecting transfer of the property to the surviving spouse

4. [] To protect the interests of the creditors of (business name):
   a. Within (specifically):
   b. See attachment 4b for order protecting interest of creditors of the business

5. a. XX The property described in attachment 5a is property that belongs to (name): JANET A. GORDON
     the surviving spouse, under Probate Code §100 and 101, and the surviving spouse's ownership is hereby confirmed.
   b. See attachment 5b for further order respecting transfer of the property to the surviving spouse

6. XX $ 3,000.00 is approved as attorney fees.

7. [] All property described in the Spousal Property Petition that is not property passing to the surviving spouse under Probate Code § 649.1 or belonging to the surviving spouse under Probate Code §100 and 101, shall be subject to administration in the estate.

8. (Name):

Date: August 26, 1985

Undivided one-half (1/2) community property interest of decedent and deceased spouse, CHARLES ROY GORDON, also known as CHARLES R. GORDON, also known as C. R. GORDON, also known as CHARLES R. GORDON, M.D., in the following described property:

Item No. Description

All that real property situate in the City of Sacramento, County of Sacramento, State of California, described as follows:

1.

Halfplex located at 307 Brewer Avenue, Sacramento, California

Assessor’s Parcel Number 031-370-5300

Described as:

Lot 1A of London River Estates Unit No. 1, according to the official plat thereof, filed in the office of the Recorder of Sacramento County, California, on March 16, 1978, in Book 119 of Maps, Map No. 6.

EXCEPTING THEREFROM the following two (2) parcels:

(a) An undivided 1/4 interest in and to all gas, minerals and other hydrocarbons substances lying below a depth of 500 feet from the surface of said land, as reserved by London Builders, Inc., a corporation in deed recorded October 31, 1978 in Book 781031, Page 1547, Official Records.

(b) An undivided 3/4 interest in and to all gas, minerals and other hydrocarbon substances lying below a depth of 500 feet from the surface of said land without any right of entry or use of said land, as reserved in that certain deed recorded March 15, 1979, in Book 790315, Page 570 Official Records, executed by Lewis Development, Inc., a California corporation.
9 acres unimproved land located on Bruceville Road, Sacramento, California
Assessor's Parcel Number 117-182-1900
Described as:

Lot 10 of Hewitt Subdivision No. 4, according to the official plat thereof filed in the Sacramento County Recorder's Office on January 24, 1914, in Book 14 of Maps, Map No. 55.

continued

EXCEPTING THEREFROM the West 40 feet located in Hewitt Avenue.

ALSO EXCEPTING THEREFROM an undivided 1/2 interest in all oil, gas, asphaltum, minerals and other hydrocarbon substances in or on said land, below a depth of 500 feet from the surface of said land, together with the right to produce, explore, develop and extract said substances, but without, however, the right of surface entry on the surface of said land or within said 500 feet from the surface thereof, as reserved by John Hunt Healy and Mary Anne Healy, his wife, by deed recorded May 5, 1978, in Book 780505, Official Records, page 1419.
Joint Tenancy Deed

This Deed, made the __________ day of __________, one thousand nine hundred and eighty-six

Between

Edwin F. Becker and

Edith F. Becker, his wife,

and

Ruth F. Becker, his daughter,

and

Grace F. Becker, his sister,

and

Thad F. Becker, all of joint tenancy.

Grantees

Witnesseth: That the said Grantor, in consideration of the sum of ________ dollars, etc.

Lawful money of the United States of America, in hand paid by the said Grantees, the receipt

whereof is hereby acknowledged, do hereby grant, bargain, and sell unto the

said Grantees, joint tenants, and in fee simple, together with the appurtenances and

easements appertaining thereto, forever.

in and upon, or parcel of land situate in Elk Grove

County of Sacramento, State of California,

and bounded and described as follows:

Lot 44, "Plat of McVittie Subdivision No. 4," 23rd day of November, 1951.

Book 4 of maps, Map No. 53.

17-002-020-0000

Witnesses:

[Signature]

[Signature]

[Signature]

Revised April 2013
RECORDING REQUESTED BY
Mr. & Mrs. Charles F. Clark

AND WHEN RECORDED MAIL TO
Mr. & Mrs. Charles F. Clark
121 Lawson Road
Kensington, CA 94707

Individual Quitclaim Deed

The undersigned grantor(s) declare(s): For consideration less than $100.00
Documentary transfer tax is $_-
( ) conveyed on full value of property conveyed, or
( ) conveyed as full value less value of liens and encumbrances remaining at time of sale.
( ) Unincorporated area: ( ) City of

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Edwin F. Becker, Edith E. Becker, and Gloria J. (nee Becker) Clark,
all as joint tenants,
hereby RESIGNED, RELEASED AND FOREVER QUITCLAIM S to

Charles F. Clark and Gloria J. Clark, husband and wife, as community property,

the following described real property in Elk Grove, County of Sacramento,
State of California:


Dated MAY 19, 1951.

Edwin F. Becker
Edith E. Becker
Gloria J. (Becker) Clark

STATE OF CALIFORNIA
COUNTY OF SACRAMENTO

On MAY 19, 1951, before me, the undersigned, a Notary Public in and for said State, personally appeared
EDWIN F. BECKER AND
EDITH E. BECKER AND
GLORIA J. (BECKER) CLARK

known to me to be the persons whose name as subscribers to the within instrument and acknowledged that the same
executed the same.

WITNESS my hand and official seal.

Signature

MAIL TAX STATEMENTS AS DIRECTED ABOVE
RECORDED AT THE REQUEST OF
AND WHEN RECORDED RETURN TO:

DOWNY, BRAND, SEYMOUR & ROHRER
JAMES A. WILLET
555 Capitol Mall, 10th Floor
Sacramento, California 95814-4686

MAIL TAX STATEMENTS TO:
Mr. & Mrs. John F. Whisenhunt
1629 - 13th Avenue
Sacramento, California 95819

JOHN F. WHISENHUNT and GENETTE R. WHISENHUNT, his
wife, as joint tenants, hereby grant to JOHN F. WHISENHUNT and
GENETTE R. WHISENHUNT, Trustees of the WHISENHUNT FAMILY TRUST,
dated February 15, 1989, their undivided one-half (1/2) interest
in the following described Sacramento County, California, real
property:

All that portion of Lots 8 and 9 as shown on
the official "Plat of Hewitt Subdivision No. 4,"
recorded in the office of the County Recorder
of Sacramento County, January 24, 1914, in
Book 14 of Maps, Map No. 55, described as
follows:

Beginning at a point in the line between Lots 7
and 8 of said Subdivision, distant South 89° 58'
West 561.0 feet from the Northwest corner of said Lot 8, said point of beginning also being in the center line of Duluth Avenue; running thence South 20° 24' East 667.1 feet to a point on the South line of Lot 9 which is distant South 89° 56' West 96.2 feet from the Northeast corner of Lot 10 of said Subdivision; thence along the South line of said Lot 9 South 89° 56' West 1081.1 feet to the West line of said Lot 9; thence North 625.44 feet to the Northwest corner of said Lot 8; thence along the center line of Duluth Avenue North 89° 56' East 848.56 feet to the place of beginning, containing 13.85 acres, more or less.

APN 117-0182-001-0000


[Signature]

STATE OF CALIFORNIA

COUNTY OF SACRAMENTO

On this day, February 15, 1989, before me, the undersigned, a Notary Public in and for the State of California, personally appeared JOHN F. WEISENHUNT and GENETTE M. WEISENHUNT, known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same.

[Signature]

JAMES A. WILLET

NOTARY PUBLIC

SACRAMENTO COUNTY, CALIFORNIA

GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

SEA VIEW LUMBER CO., INC., a California corporation

hereby GRANTS to

BOREL BANK AND TRUST COMPANY, a California corporation,
TRUSTEE OF THE HERMAN STARKER TRUST

the real property in the City of Sacramento
County of Sacramento, State of California, described as

SEE "EXHIBIT A" ATTACHED HERETO AND MADE A PART HEREOF

Dated February 2, 1990

SEA VIEW LUMBER CO., INC.,
a California corporation

By: Robert L. Duprez, President

Jane Duprez Grundstrom, Witness

Nancy Wallace, Secretary-Treasurer
On February 21, 1990, before me, JOHN F. DeNIOLO, a Notary Public
in and for the County of Sonoma, State of California, residing therein, duly commissioned and sworn, personally appeared JANE
DUPRET GRUNDSTROM, known to me to be the person whose name is
subscribed to the within instrument as witness thereto, who,
being by me duly sworn deposed and said: that she resides in the
County of Sonoma, State of California; that she was present in
and saw ROBERT L. DUPRET and FRANCES B. DUPRET, personally known to
her to be the President and Vice President, respectively, of the
corporation, at the time of execution, that executed the within
instrument, and also known to her to be the person who executed
it on behalf of such corporation, and acknowledged to her that
such corporation executed the same, and further acknowledged to
her that such corporation executed the within instrument pursuant
to its by-laws or a resolution of its Board of Directors; that
the said ROBERT L. DUPRET and FRANCES B. DUPRET duly
acknowledged, in the presence of said affiant, that they executed
the same and that she, the said affiant, thereupon, and at the
request of said ROBERT L. DUPRET and FRANCES B. DUPRET,
subscribed her name as witness thereto.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my
official seal in the County of Sonoma, State of California, the
day and year in this certificate first above written.

[Signature]
Notary Public in and for said
county and state
EXHIBIT A  
ORDER NO. 902481

DESCRIPTION

THAT REAL PROPERTY SITUATED IN THE CITY OF SACRAMENTO, COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

THAT PORTION OF LOTS 8 AND 9, OF HENIIT SUBDIVISION NO. 4, ACCORDING TO THE OFFICIAL PLAT THEREOF, FILED IN THE OFFICE OF THE RECORDER OF SACRAMENTO COUNTY, CALIFORNIA, ON JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55, RECORDS OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIPE MARKING THE SOUTHEAST CORNER OF SAID LOT 9 AND RUNNING THENCE SOUTH 88 DEG. 38' WEST 461.0 FEET TO AN IRON PIPE MARKING THE NORTHEAST CORNER OF LOT 10 OF SAID SUBDIVISION; THENCE SOUTH 89 DEG. 50' WEST ALONG THE DIVISION LINE BETWEEN SAID LOTS 9 AND 10, A DISTANCE OF 96.2 FEET; THENCE NORTH 20 DEG. 24' WEST 667.1 FEET TO THE NORTH LINE OF SAID LOT 8; SAID LINE BEING THE CENTER OF DULUTH AVENUE; THENCE NORTH 89 DEG. 56' EAST ALONG THE CENTER LINE OF SAID AVENUE, 561.0 FEET TO THE NORTHEAST CORNER OF SAID LOT 8; THENCE SOUTH 20 DEG. 24' EAST ALONG THE EAST LINE OF SAID LOTS 8 AND 9 TO THE PLACE OF BEGINNING.


AND ALSO EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS, ASPHALTUM MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE, EXPLORE, DEVELOP AND EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHT OF SURFACE ENTRY ON THE SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF, AS RESERVED BY CHARLES R. GORDON AND JANET A. GORDON, IN THE DEED RECORDED OCTOBER 26, 1979 IN BOOK 7914-26 OFFICIAL RECORDS, PAGE 488.
GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

BORDEL BANK AND TRUST COMPANY, a California corporation
TRUSTEE OF THE NERMAN STARKER TRUST
hereby GRANT(S) to

KEET NERMAN, a single man,
the real property in the City of Sacramento County of Sacramento, State of California, described as

SEE "EXHIBIT A" ATTACHED HERETO AND MADE A PART HEREOF

Dated February 2, 1990

BORDEL BANK AND TRUST COMPANY
a California corporation

By:

[Signature]

[Seal]

Mail Tax Statements as Directed Above
STATE OF CALIFORNIA
COUNTY OF SAN MATEO

On February 5, 1990, before me, the undersigned Notary Public, in and for
said County, personally appeared Ronald C. Fick
and
Alfredo A. Solano, personally known to me, and acknowledged to me to be the person who executed the within instrument as Executive,
Vice President and Sr. Trust Officer, on behalf of
Borel Bank & Trust Co.

the corporation therein named, and acknowledged to me that
such corporation executed the within instrument pursuant to its
by-laws and a resolution of its Board of Directors.

WITNESS my hand and official seal.

Signature: Patricia L. Binsworth

(Official Seal)

Patricia L. Binsworth
Notary Public - California

SHE UNITED STATE
By virtue of power Dec 10, 1994

(The area for official notarial seal)
EXHIBIT A
ORDER NO. 902481

DESCRIPTION

THAT REAL PROPERTY SITUATED IN THE CITY OF SACRAMENTO, COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

THAT PORTION OF LOTS 8 AND 9, OF HEWITT SUBDIVISION NO. 4, ACCORDING TO THE OFFICIAL PLAT THEREOF, FILED IN THE OFFICE OF THE RECORDER OF SACRAMENTO COUNTY, CALIFORNIA, ON JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55, RECORDS OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIPE MARKING THE SOUTHEAST CORNER OF SAID LOT 9 AND RUNNING THENCE SOUTH 88 DEG. 18' WEST 461.0 FEET TO AN IRON PIPE MARKING THE NORTHEAST CORNER OF LOT 10 OF SAID SUBDIVISION; THENCE SOUTH 89 DEG. 58' WEST ALONG THE DIVISION LINE BETWEEN SAID LOTS 9 AND 10, A DISTANCE OF 96.2 FEET; THENCE NORTH 20 DEG. 24' WEST 667.1 FEET TO THE NORTH LINE OF SAID LOT 8; SAID LINE BEING THE CENTER OF DULUTH AVENUE; THENCE NORTH 89 DEG. 58' EAST ALONG THE CENTER LINE OF SAID AVENUE, 561.0 FEET TO THE NORTHEAST CORNER OF SAID LOT 8; THENCE SOUTH 20 DEG. 24' EAST ALONG THE EAST LINE OF SAID LOTS 8 AND 9 TO THE PLACE OF BEGINNING.


AND ALSO EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL, OIL, GAS, ASPHALTUM MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE, EXPLORE, DEVELOP AND EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHT OF SURFACE ENTRY ON THE SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF, AS RESERVED BY CHARLES R. GORDON AND JANET A. GORDON, IN THE DEED RECORDED OCTOBER 26, 1979 IN BOOK 7910-26 OFFICIAL RECORDS, PAGE 408.
DESCRIPTION

THAT REAL PROPERTY SITUATED IN THE CITY OF SACRAMENTO, COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

THAT PORTION OF LOTS 8 AND 9, OF HENITT SUBDIVISION NO. 4, ACCORDING TO THE OFFICIAL PLAT THEREOF, FILED IN THE OFFICE OF THE RECORDER OF SACRAMENTO COUNTY, CALIFORNIA, ON JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55, RECORDS OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIPE MARKING THE SOUTHEAST CORNER OF SAID LOT 9 AND RUNNING THENCE SOUTH 88 DEG. 38' WEST 461.0 FEET TO AN IRON PIPE MARKING THE NORTHEAST CORNER OF LOT 10 OF SAID SUBDIVISION; THENCE SOUTH 89 DEG. 58' WEST ALONG THE DIVISION LINE BETWEEN SAID LOTS 9 AND 10, A DISTANCE OF 96.2 FEET; THENCE NORTH 20 DEG. 24' WEST 667.1 FEET TO THE NORTH LINE OF SAID LOT 8; SAID LINE BEING THE CENTER OF DULUTH AVENUE; THENCE NORTH 89 DEG. 58' EAST ALONG THE CENTER LINE OF SAID AVENUE, 561.0 FEET TO THE NORTHEAST CORNER OF SAID LOT 8; THENCE SOUTH 20 DEG. 24' EAST ALONG THE EAST LINE OF SAID LOTS 8 AND 9 TO THE PLACE OF BEGINNING.


AND ALSO EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS, ASPHALTUM MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE, EXPLORE, DEVELOP AND EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHT OF SURFACE ENTRY ON THE SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF, AS RESERVED BY CHARLES R. GORDON AND JANET A. GORDON, IN THE DEED RECORDED OCTOBER 26, 1979 IN BOOK 7910-26 OFFICIAL RECORDS, PAGE 40J.
CORPORATION GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

See View Lumber Company, Inc., a California Corporation

a corporation organized under the laws of the State of California, does hereby
GRANT to

J & L Properties, a California General Partnership

the real property in the City of Sacramento

Sacramento County

as

SEE EXHIBIT A ATTACHED HERETO, MADE A PART HEREOF, AND BY THIS REFERENCE INCORPORATED HEREIN, FOR LEGAL DESCRIPTION.

Dated April 23, 1990

STATE OF CALIFORNIA

COUNTY OF

On April 23, 1990

before me, the undersigned, a Notary Public in and for said State, personally appeared Robert L. Dupre

and Nancy Dupre-Wallace

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) who executed the within instrument as

and

Secretary

Robert L. Dupre,

President

Nancy Dupre-Wallace

Secretary

the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Notary Public

STATE OF CALIFORNIA

COUNTY OF LUNA

On this 23rd day of April, 1990

before me, the undersigned, a Notary Public in and for said State, personally appeared Robert L. Dupre

and Nancy Dupre-Wallace

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) who executed the within instrument as

and

Secretary

Robert L. Dupre,

President

Nancy Dupre-Wallace

Secretary

the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Notary Public
EXHIBIT "A"

DESCRIPTION

THAT REAL PROPERTY SITUATED IN THE CITY OF SACRAMENTO, COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH LINE OF SECTION 14, TOWNSHIP 7 NORTH, RANGE 5 EAST, WHERE SAID SOUTH LINE IS INTERSECTED BY THE CENTERLINE OF THE UPPER STOCKTON ROAD, SO-CALLED; SAID POINT OF INTERSECTION BEING FURTHER LOCATED AS 2607 FEET WESTERLY FROM THE ONE QUARTER SECTION CORNER COMON TO SAID SECTION 14 AND SECTION 23, SAID TOWNSHIP AND RANGE; THENCE FROM SAID POINT OF BEGINNING NORTH 20 DEG 57' WEST ALONG THE CENTER LINE OF SAID UPPER STOCKTON ROAD 1136 FEET; THENCE SOUTH 88 DEG 38-1/2' WEST 667.2 FEET TO AN IRON PIPE MARKING THE SOUTHEAST CORNER OF LOT 9 OF HEMITT SUBDIVISION NO. 4 AS SHOWN ON THE OFFICIAL PLAT THEREOF FILED FOR RECORD IN THE COUNTY RECORDER'S OFFICE OF SACRAMENTO COUNTY, JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55; THENCE CONTINUING SOUTH 88 DEG 38-1/2' WEST AND ALONG THE SOUTH LINE OF SAID LOT 9, 461 FEET TO AN IRON PIPE MARKING THE NORTHEAST CORNER OF LOT 10 OF SAID HEMITT SUBDIVISION NO. 4; THENCE SOUTH 9 DEG 49' EAST LONG THE EASTERLY LINES OF LOTS 10, 11 AND 12 OF SAID SUBDIVISION, 1059.5 FEET TO AN IRON PIPE MARKING THE SOUTHEAST CORNER OF LOT 12 OF SAID SUBDIVISION; THENCE NORTH 89 DEG 34' EAST 1353.3 FEET ALONG FENCE LINE AND THE SOUTH LINE OF SECTIONS 12 AND 14, SAID TOWNSHIP AND RANGE, TO POINT OF BEGINNING.

EXCEPTING THEREFROM THE FOLLOWING:

BEGINNING AT A POINT ON THE SOUTH LINE OF SECTION 14, IN SAID TOWNSHIP AND RANGE WHERE SAID SOUTH LINE IS INTERSECTED BY THE CENTERLINE OF THE UPPER STOCKTON ROAD, SO-CALLED; SAID POINT OF INTERSECTION BEING FURTHER LOCATED AS 2607 FEET WESTERLY FROM THE ONE QUARTER SECTION CORNER COMMON TO SAID SECTION 14 AND SECTION 23, IN SAID TOWNSHIP AND RANGE; THENCE FROM SAID POINT OF BEGINNING SOUTH 89 DEG 34' WEST 1353.5 FEET ALONG THE SOUTH LNE OF SAID SECTION 15 TO THE SOUTHEAST CORNER OF LOT 12 AS SHOWN ON THE OFFICIAL "PLAT OF HEMITT SUBDIVISION NO. 4", Records in the Office of the County Recorder of Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55; THENCE NORTH 9 DEG 49' WEST 205 FEET ALONG THE EASTERN LINE OF SAID LOT 12; THENCE NORTH 89 DEG 34' EAST 1311.1 FEET TO A POINT IN THE CENTER LINE OF THE SAID UPPER STOCKTON ROAD AND THENCE SOUTH 20 DEG 57' EAST 516.3 FEET ALONG SAID CENTER LINE TO THE POINT OF BEGINNING.
For value received JACK HUNT HEALY,

GRANT S. to JACK HUNT HEALY AND MARGARET S. HEALY, his wife,

as JOINT TENANTS all that real property situate in the

County of Sacramento, State of California, described as follows:

Parcel No. 1- Lot 10 as shown on the Official "Plat of
Hewitt Subdivision No. 4", recorded in the office of the
County Recorder of said Sacramento County, January 24, 1914,
in Book 14 of Maps, Map No. 55, EXCEPT the West 40 Feet
located in Hewitt Avenue.

Parcel No. 2- That portion of Lots 8 and 9 as shown on the
official "Plat of Hewitt Subdivision No. 4", recorded in
the office of the County Recorder of said Sacramento County,
January 24, 1914, in Book 14 of Maps, Map No. 55 described
as:

Commencing at an iron pipe marking the Southeast corner of
said Lot 9 and running thence South 88° 38' West 461.0 Feet to
an iron pipe marking the Northeast corner of Lot 10 of said
Subdivision; thence South 89° 58' West along the division line
between said lots 9 and 10, a distance of 98.2 Feet; thence North
20° 24' East 667.1 Feet to the North line of said Lot 8; said
line being the center of Duluth Avenue; thence North 89° 58'
East along the center line of said Avenue 961.0 Feet to the
Northeast corner of said Lot 8; thence South 20° 24' East along
the East line of said Lots 8 and 9 to the place of beginning,
containing 8 acres more or less.

Date: July 25th, 1957

[Signature]

STATE OF CALIFORNIA

City and County of San Francisco

On July 25th, 1957, before me, the undersigned officer, personally appeared

MARGARET S. HEALY

and declared that he had executed the instrument set forth above

and that the same is the free act and deed of the said Margaret S. Healy

for the purpose intended.

[Signature]

August 27, 1957
IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA,
IN AND FOR THE COUNTY OF SACRAMENTO

In the Matter of the Petition of
JOSE CUPICH to Establish Fact of
Death of
JUANITA CUPICH,
Deceased.

No. 53200
Dept. 4
JUDGMENT ESTABLISHING FACT OF
DEATH AND THAT NO INHERITANCE
TAX IS PAYABLE

The verified petition of JOSE CUPICH to establish the
fact of death of the above-named decedent with respect to an
interest in certain real properties affected by the death of the
decedent came on regularly to be heard this day. On proof made
to the satisfaction of the Court, the Court finds that notice of
hearing has been given as required by law; that the allegations of
the Petition are true; that the inheritance tax appraiser’s report
that no inheritance tax is payable is on file herein; and that
Petitioner shall pay to the inheritance tax appraiser the sum of
$39.65 as a reasonable amount for his services and expenses, which
have been paid.

IT IS ORDERED AND ADJUDGED that:

1. The decedent died on December 4, 1961, and at the time
   of her death was a resident of Sacramento County, California.

2. The right, title, and interest of the decedent in the
   properties described in Exhibit A, which is attached hereto and
   made a part hereof by reference, terminated on her death and became
   vested in JOSE CUPICH, as surviving joint tenant.
3. The State of California has no claim or lien against
the properties for inheritance taxes, and all inheritance taxes
chargeable herein have been paid.

DATED: January 11, 1962.

JAY L. HENRY
Judge of the Superior Court
EXHIBIT A

All that certain real property situated in the County of Sacramento, State of California, described as follows:

PARCEL ONE:
All that portion of Lot 7, as shown on the official "Plat of Hewitt Subdivision No. 4," filed January 24, 1914, in Book 14 of Maps, Map No. 55, in the office of the County Recorder of Sacramento County, California, described as follows:
Beginning at a point on the South line of said Lot 7 and on the center line of Duluth Avenue, a 40 foot road, located North 89° 58' East 294.3 feet from the Southeast corner of said Lot 7 (said Southeast corner of Lot 7 being located on the West line of Hewitt Avenue, a 40 foot road) running thence South 89° 58' East 650.7 feet along the South line of said Lot 7 and the center line of said road to a point; thence North 342.51 feet to a point; thence North 89° 58' West 650.7 feet along the North line of said Lot 7; thence South 89° 58' West 650.7 feet to the point of beginning, containing 5.12 acres, more or less.

Appraised at $8,500.00

PARCEL TWO:
All the portion of Lots 8 and 9, as shown on the official "Plat of Hewitt Subdivision No. 4," filed January 24, 1914, in Book 14 of Maps, Map No. 55, in the office of the County Recorder of Sacramento County, California, described as follows:
Beginning at a point in the line between Lots 7 and 8 of said subdivision, distant South 89° 58' West 561.0 feet from the Northeast corner of said Lot 8, said point of beginning also being in the center line of Duluth Avenue; running thence South 20° 24' East 687.1 feet to a point on the South line of Lot 9 which is distant South 89° 58' West 96.2 feet from the Northeast corner of Lot 10 of said subdivision; thence along the South line of said Lot 9 South 89° 58' West 1081.11 feet to the West line of said Lot 9; thence North 525.44 feet to the Northeast corner of said Lot 8; thence along the center line of Duluth Avenue North 89° 58' East 948.56 feet to the point of beginning; containing 13.85 acres, more or less.

Appraised at $24,000.00

ITEM THREE:
Promissory Note in the sum of $8,975.00 dated January 16, 1959, executed by Willis D. Zimmerman, Meria A. Zimmerman, Paul Almas, and Donna Almas, and payable to Joe Cupich and Jennie Cupich, his wife, as joint tenants, which note is secured by Deed of Trust dated January 16, 1959, executed by Willis D. Zimmerman and Meria A. Zimmerman, his wife; and Paul Almas and Donna Almas, his wife, as Trustor, to California Pacific Title Company, Sacramento Division, as Corporation as Trustee, and Joe Cupich and Jennie Cupich, his wife, as joint tenants, as Beneficiary, covering real property situated in the City of Sacramento, County of Sacramento, State of California, to wit: The South one-quarter of Lot 8 in block bounded by 22nd and 23rd, "P" and "Q" Streets of...
Exhibit A—Item Three (Cont.):

the City of Sacramento, according to the map or plan thereof, subject to a subordination clause, which said deed of trust was recorded on January 27, 1959, in Volume 3687 of Official Records, page 363, Sacramento County Records.
The unpaid balance at date of death was $7,100.00

STATE OF CALIFORNIA, } ss.
County of Sacramento

I, C. C. LaRue, County Clerk of the County of Sacramento, State of California, and ex-officio Clerk of the Superior Court held in and for said County and State aforesaid, hereby certify that I have compared the foregoing copy with the original instrument on file and of record in my office, and that the same is a full, true and correct copy of such original, with the endorsements thereof, and of the whole thereof.

Attest my hand and seal of said Court this...

FEE $4.40

C. C. LaRUE, County Clerk.

By: [Signature] Deputy Clerk.
IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA,
IN AND FOR THE COUNTY OF SACRAMENTO

In the Matter of the Estate of

JOSEPH CUPICH, also known as
JOK CUPICH,

Deceased.

No. 55701

ORDER SETTLE FIRST AND FINAL ACCOUNT AND REPORT OF EXECUTOR
AND DEGREE OF FINAL DISTRIBUTION

PETE TUBOSKO, as Executor of the Estate of JOSEPH CUPICH,
also known as JOE CUPICH, Deceased, having heretofore filed his
First and Final Account and Report and Petition for its settlement
and for Final Distribution, and the Account, Report, and Petition
coming on this day regularly for hearing, the Court finds:

Due and legal notice of the settlement of the Account
and of the hearing on the Petition for Final Distribution of the
estate has been regularly given for the period and in the manner
prescribed by law.

All the acts and transactions of the Executor during the
period of the Account are truly shown and should be approved, and
all the allegations of the Petition for its settlement and for
final distribution are true. Since the rendition of the account
the sum of $100.00 has been received from S. E. LAR, rental for
the months of February and March, 1964. The account is full, true,
and correct and should be settled, allowed, and approved as filed.

JOSEPH CUPICH, also known as JOE CUPICH, died testate on
February 8, 1963, in the County of Sacramento, State of California,
being at the time of his death a resident thereof.

On March 5, 1963, PETER TUNESKO was appointed Executor
of the decedent's estate and qualified as such on that date, and
ever since has been and now is the Executor of the decedent's
estate.

Notice to Creditors has been published for the period
and in the manner prescribed by law. Within thirty days after the
completion of publication of notice to creditors there was filed
with the Clerk of this Court an Affidavit showing due publication
of notice to creditors in the manner and form required by law.

More than six months have elapsed since the issuance of
Letters Testamentary in the estate and since the first publication
of Notice to Creditors, and the time for filing or presenting
claims has expired, and the estate is now in a condition to be
closed.

All claims filed or presented against the estate have
been allowed by the Executor, and approved by this Court and paid.

All debts of the decedent and of the estate and all
expenses of administration thereof except closing expenses, commis-
sions of Executor, and attorneys' fees have been paid.

A written Amended Report of the inheritance tax appraiser
appointed herein is on file, and an Order Setting Aside Order
Fixing Inheritance Tax was filed on January 28, 1964; and the
amended Order Fixing Inheritance Tax in the estate in the sum of
$2,574.00 has been made by this Court. The tax has been paid in
full as evidenced by the receipt of the County Treasurer of the
County of Sacramento on file herein.

No federal estate tax return has been made or filed for
this estate for the reason that the estate was not sufficient to
require such a return and no federal estate tax is due.

No California state or federal income taxes are payable
in the estate.

-2-
The estimated expenses of closing the estate are $10.00, and the Executor should be authorized to withhold that sum from distribution.

The Executor should be authorized and directed to pay to himself the sum hereafter specified as his statutory commissions for his services rendered in the administration of this estate and to pay HIRSITY & TARELL, his attorneys, the sum hereafter specified as their statutory fees for their services rendered in the administration of this estate.

All the assets of the estate are the separate property of the decedent.

By the terms of the Will of decedent duly admitted to probate hereof, the estate should be distributed as follows:

To MILTON CUPICH, nephew, the sum of $3,000.00; To ANN BOVARICA, sister, the sum of $3,000.00; and, To MARIE FRANCES EVANOVICH and ANN ROSE GIERE, formerly Ann Rose Masonich, each an undivided one-half interest in and to all of the rest, residue, and remainder of the estate of decedent.

NOW, THEREFORE, IT IS HEREBY ORDERED AND ADJUDGED THAT:

1. The administration of the estate is brought to a close.

2. The First and Final Account, Petition, and Report of the Executor are settled, allowed, and approved as filed and as amended herein.

3. All the acts and transactions of the Executor relating to the matters set forth in the Account, Petition, and Report are ratified, confirmed, and approved.

4. The Executor is authorized and directed to retain the sum of $10.00 from distribution at this time to defray closing expenses.

5. The Executor is authorized and directed to pay to himself the sum of $1,205.25 as statutory fees for his services.
rendered in the administration of this estate, and to pay

6. Notice to Creditors has been duly given as required
by law.

7. The California inheritance taxes due and payable by
the estate have been paid.

8. The Executor is authorized to deduct from the distribu-
tive shares of the persons hereafter named the sum set opposite
their names for inheritance taxes paid by the Executor in their
behalf, as follows:

   MILTON CUPICH, nephew               $  60.00
   ANA BOKARICA, sister                 $  60.00
   MARIE FRANCES IVANOVICH, stepdaughter$ 1,227.00
   ANN ROSE MASICH, now ANN ROSE CIERE, stepdaughter $ 1,227.00

9. The estate in the possession of the Executor remaining
for distribution after the payments and withholdings herein ordered
in Paragraphs 4 and 5 immediately above this paragraph consists of
the following described property which is distributed in the fol-

(A) To MILTON CUPICH, nephew of decedent, the sum of $3,000.00,
less, however, the California inheritance tax thereon in the sum
of $60.00, paid by the Executor in his behalf;

(B) To ANA BOKARICA, sister of decedent, the sum of $3,000.00,
less, however, the California inheritance tax thereon in the sum
of $60.00, paid by the Executor in her behalf;

(C) To MARIE FRANCES IVANOVICH, stepdaughter of decedent, the
sum of $50.00, representing one-half of the rentals received sub-
sequent to the filing of the Account herein;

(D) To ANN ROY MASICH, now ANN ROSE CIERE, stepdaughter of
decedent, the sum of $50.00, representing one-half of the rentals
received subsequent to the filing of the Account herein; and,
(E) To MARIE FRANCES EVAKOVIĆ and ANN ROSE CIREE, formerly ANN ROSE NASOVIĆ, stepdaughters of decedent, each an undivided one-half interest in and to all that certain real property situated in the County of Sacramento, State of California, more particularly described as follows:

PARCEL ONE:
All that portion of Lot 7 as shown on the official "Plat of Hemet Subdivision No. 4," recorded in the office of the County Recorder of Sacramento County on January 24, 1914, in Book 14 of Maps, Map No. 55, described as follows:

Beginning at a point on the South line of said Lot 7, and on the center line of Duluth Avenue, a 40 foot road, located North 89° 50' East 294.3 feet from the Northwest corner of said Lot 7 (said Northwest corner of Lot 7 being located on the West line of Hemet Avenue, a 40 foot road) running thence from said point of beginning North 89° 58' East 650.7 feet along the South line of said Lot 7 and the center line of said road to a point; thence North 342.61 feet to a point on the North line of said Lot 7; thence South 89° 58' West 650.7 feet along the North line of said Lot 7 to a point; thence South 342.61 feet to the point of beginning, containing 5.12 acres, more or less.

PARCEL TWO:
All that portion of Lots 8 and 9 as shown on the official "Plat of Hemet Subdivision No. 4," recorded in the office of the County Recorder of Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55, described as follows:

Beginning at a point in the line between Lots 7 and 8 of said Subdivision, distant South 89° 58' West 561.0 feet from the Northwest corner of said Lot 8, said point of beginning also being in the center line of Duluth Avenue; running thence South 20° 24' East 667.1 feet to a point on the South line of Lot 9 which is distant South 89° 58' West 96.2 feet from the Northwest corner of Lot 10 of said Subdivision; thence along the South line of said Lot 9 South 89° 58' West 1081.11 feet to the West line of said Lot 9; thence North 625.44 feet to the Northwest corner of said Lot 8; thence along the center line of Duluth Avenue North 89° 58' East 848.56 feet to the place of beginning, containing 13.85 acres, more or less.

10. Any other property of the estate not now known or discovered which may belong to the estate, or in which the decedent or the estate may have any interest, is hereby distributed as follows:

(A) One-half thereof to MARIE FRANCES EVAKOVIĆ, stepdaughter of decedent; and,

(B) One-half thereof to ANN ROSE CIREE, formerly ANN ROSE NASOVIĆ,
stepdaughter of decedent.

DATED: March 24, 1964.

JAY L. HENRY
Judge of the Superior Court

MAR 25 1964
C. C. LA RUE, County Clerk and, ex-officio Clerk of the Superior Court
in and for the County of Sacramento,
State of California,

By
DEPUTY

$6.00
TRUSTEE'S DEED UPON SALE

A.P.M. No. 117-0182-018-0020

The undersigned grantor declares:

1) The grantee herein was the foreclosing beneficiary.
2) The amount of the unpaid debt together with costs was $1,784,573.51
3) The amount paid by the grantee to the trustee sale was $1,784,573.51
4) The documentary transfer tax is $0.00
5) Said property is in the City of SACRAMENTO and MORTGAGE LENDER SERVICES, INC., A CALIFORNIA CORPORATION

(heretofore called Trustee), as the duly appointed Trustee under the Deed of Trust hereinafter described, does hereby grant and convey, but without warranty, express or implied, to SEA VIEW LUMBER COMPANY, INC., a California corporation

(heretofore called Grantee), all of its right, title and interest in and to that certain property situated in the County of SACRAMENTO State of California, described as follows: SEE EXHIBIT 'A' ATTACHED HERETO

RECEITALS:
This conveyance is made pursuant to the powers conferred upon Trustee by that certain Deed of Trust dated 04/27/90 and executed by J & L PROPERTIES, a California General Partnership, consisting of Jack Swiagert & Associates and Larry Carter Homes as Trustor, and recorded 01/12 in Book 90-05-1 Page 0283 as Instrument No. of Official Records of SACRAMENTO County, California, and after fulfills the conditions specified in said Deed of Trust authorizing this conveyance

Default occurred as set forth in a Notice of Default and Election to Sell which was recorded in the office of the Recorder of said County.

All requirements of law regarding the mailing of copies of notices or the publication of a copy of the Notice of Default or the personal delivery of the copy of the Notice of Default and the posting and publication of copies of the Notice of a Sale have been complied with.

Said property was sold by said Trustee at public auction on 04/22/92 at the place named in the Notice of Sale, in the County of SACRAMENTO, California, in which the property is situated. Grantee, being the highest bidder at such sale, became the purchaser of said property and paid therefore to said trustee the amount bid being $1,784,573.51 in lawful money of the United States, or by the satisfaction, pro tanto, of the obligations then secured by said Deed of Trust.

Date: 04/22/92
MORTGAGE LENDER SERVICES, INC.
AS TRUSTEE

X
Marsha Townsend, President

STATE OF CALIFORNIA
COUNTY OF SACRAMENTO
On 04/22/92—before me, Susan Shields, a Notary Public in and for said county, personally appeared

Marsha Townsend
personally known to me for proved to me on the basis of satisfactory evidence to be the person(s) whose signature(s) is (are) subscribed to the within instrument and acknowledged to me that she (he) executed the same in her (his) authorized capacity(ies), and that by her (his) signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal.

Notary Public

SUSAN SHIELDS

Notary Public in

(Signed)

[Seal]

(Signed)

(CATRDO010)
DESCRIPTION

THAT REAL PROPERTY SITUATED IN THE CITY OF SACRAMENTO, COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH LINE OF SECTION 14, TOWNSHIP 7 NORTH, RANGE 5 EAST, WHERE SAID SOUTH LINE IS INTERSECTED BY THE CENTER LINE OF THE UPPER STOCKTON ROAD, SO-CALLED; SAID POINT OF INTERSECTION BEING FURTHER LOCATED AS 2607 FEET WESTERLY FROM THE ONE QUARTER SECTION CORNER COMMON TO SAID SECTION 14 AND SECTION 23, SAID TOWNSHIP AND RANGE; THENCE FROM SAID POINT OF BEGINNING NORTH 26 DEG 57' WEST ALONG THE CENTER LINE OF SAID UPPER STOCKTON ROAD 1136 FEET; THENCE SOUTH 88 DEG 38-1/2' WEST 667.2 FEET TO AN IRON PIPE MARKING THE SOUTHEAST CORNER OF LOT 9 OF HEWITT SUBDIVISION NO. 4 AS SHOWN ON THE OFFICIAL PLAT THEREOF FILED FOR RECORD IN THE COUNTY RECORDER'S OFFICE OF SACRAMENTO COUNTY, JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55; THENCE CONTINUING SOUTH 88 DEG 38-1/2' WEST AND ALONG THE SOUTH LINE OF SAID LOT 9, 461 FEET TO AN IRON PIPE MARKING THE NORTHEAST CORNER OF LOT 10 OF SAID HEWITT SUBDIVISION NO. 4; THENCE SOUTH 9 DEG 49' EAST LONG THE EASTERLY LINES OF LOTS 10, 11 AND 12 OF SAID SUBDIVISION, 1059.5 FEET TO AN IRON PIPE MARKING THE SOUTHEAST CORNER OF LOT 12 OF SAID SUBDIVISION; THENCE NORTH 89 DEG 34' EAST 1353.3 FEET ALONG FENCE LINE AND THE SOUTH LINE OF SECTIONS 15 AND 14, SAID TOWNSHIP AND RANGE, TO POINT OF BEGINNING.

EXCEPTING THEREFROM THE FOLLOWING:

BEGINNING AT A POINT ON THE SOUTH LINE OF SECTION 14, IN SAID TOWNSHIP AND RANGE WHERE SAID SOUTH LINE IS INTERSECTED BY THE CENTER LINE OF THE UPPER STOCKTON ROAD, SO-CALLED; SAID POINT OF INTERSECTION BEING FURTHER LOCATED AS 2607 FEET WESTERLY FROM THE ONE QUARTER SECTION CORNER COMMON TO SAID SECTION 14 AND SECTION 23, IN SAID TOWNSHIP AND RANGE; THENCE FROM SAID POINT OF BEGINNING SOUTH 89 DEG 34' WEST 1753.5 FEET ALONG THE SOUTH LINE BEGINNING SOUTH 89 DEG 34' WEST 1753.5 FEET ALONG THE SOUTH LINE OF SAID SECTION 15 TO THE SOUTHEAST CORNER OF LOT 12 AS SHOWN ON THE OFFICIAL "PLAT OF HEWITT SUBDIVISION NO. 4", RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SACRAMENTO COUNTY, JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55; THENCE NORTH 89 DEG 205 FEET ALONG THE EASTERN LINE OF SAID LOT 12; THENCE NORTH 89 DEG 34' EAST 1311.1 FEET TO A POINT IN THE CENTER LINE OF THE UPPER STOCKTON ROAD AND THENCE SOUTH 26 DEG 57' EAST 216.3 FEET ALONG SAID CENTER LINE TO THE POINT OF BEGINNING.
GRANT DEED (INDIVIDUAL)

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

ALLAN H. GABBLETH, an unmarried man

JOHN F. WHISENHUNT and GENETTE H. WHISENHUNT, Trustees of the Whisenhunt Family Trust

dated 2-15-89

hereby GRANT(S) to

ERB FUNDING, INC., a California corporation

the following described real property in the City and County of Sacramento, State of California:

SEE EXHIBIT "A" ATTACHED HERE TO AND MADE A PART HEREOF FOR LEGAL DESCRIPTION

Dated June 4, 1990

[Signature]

Gilbert A. Albright, Witness

STATE OF CALIFORNIA

County of

On this . 4th. day of June, 1990, before me, the undersigned, a Notary Public in and for
said County and State, personally appeared

personally known to me for proven to me on the basis of satisfactory evidence to be the person

whose name

subscribed to the within instrument and acknowledged that

executed the same.

WITNESSES:

Notary Public in and for said County and State.

(Notary Seal)
EXHIBIT "A"

That real property situated in the City of Sacramento, County of Sacramento, State of California, described as follows:

All that portion of Lots 8 and 9 as shown on the official "Plat of Hewitt Subdivision No. 4," recorded in the office of the Recorder of Sacramento County, January 24, 1914, in Book 14 of Map, Map No. 55, described as follows:

Beginning at a point in the line between Lots 7 and 8 of said subdivision distant South 89°58' East 881.0 feet from the Northwest corner of said Lot 8, said point of beginning also being in the center line of Duluth Avenue; running thence South 20°24' East 687.1 feet to a point on the South line of Lot 9 which is distant South 89°58' West 96.2 feet from the Northeast corner of Lot 10 of said Subdivision; thence along the South line of said Lot 9, South 89°58' West 1081.11 feet to the West line of said Northwest corner of said Lot 8; thence along the center line of Duluth Avenue North 69°58' East 848.56 feet to the place of beginning.

EXCEPT a mineral interest and as a royalty interest all oil, gas, hydrocarbons, minerals, valuable metals, and associated substances in, under or produced from said real property together with the right to produce, develop, explore and extract said substances, in the deed to Allan H. Galbreath, an unmarried man, as his separate property, recorded December 7, 1961, Book 81207 Official Records, page 269.

STATE OF CALIFORNIA
COUNTY OF SACRAMENTO

On June 6, 1950, before me, the undersigned, a Notary Public in and for said County and State, personally appeared Gilbert A. Albright, known to me to be the person whose name is subscribed to the within instrument as a witness thereto, who being duly sworn, deposes and says that he resides at Elk Grove, California.

Also before me, the undersigned, a Notary Public in and for said County and State, personally appeared Allen H. Galbreath, an unmarried man.

WITNESS my hand and official seal.

Lisa A. Burnett
Notary Public in and for said County and State
CORPORATION 
GRANT DEED

ERB FUNDING, INC., a California corporation
FOR A VALUABLE CONSIDERATION, DOES HEREBY GRANT TO
JS & LC INVESTMENTS, a California general partnership

the real property in the County of Sacramento, State of California, described as:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF FOR LEGAL DESCRIPTION

Dated: 5-15-90

ERB FUNDING, INC., a California corporation

By: [Signature]

(Corporation Acknowledgment)

STATE OF CALIFORNIA
County of ____________________

On this ______ day of __________ in the year 19________, before me, the undersigned, a Notary Public in and for said County and State, personally appeared ____________________, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed the within instrument or on behalf of the corporation therein named, and acknowledged to me that such corporation executed it.

WITNESS my hand and official seal:

[Notary Public's Signature]

Notary Public in and for said County and State.

MAIL TAX STATEMENT AS DIRECTED ABOVE
EXHIBIT "A"

That real property situated in the City of Sacramento, County of Sacramento, State of California, described as follows:

All that portion of Lots 8 and 9 as shown on the official "Plats of Hewitt Subdivision No. 4," recorded in the office of the Recorder of Sacramento County, January 24, 1914, in Book 1 of Maps, Map No. 55, described as follows:

Beginning at a point in the line between Lots 7 and 8 of said subdivision distant South 89°58' West 561.0 feet from the Northwest corner of said Lot 8, said point of beginning also being in the center line of Duluth Avenue; running thence South 20°24' East 657.1 feet to a point on the South line of Lot 9 which is distant South 89°58' West 96.2 feet from the Northwest corner of Lot 10 of said subdivision; thence along the South line of said Lot 9, South 89°58' West 1081.11 feet to the West line of said Northwest corner of said Lot 8; thence along the center line of Duluth Avenue North 69°58' East 848.56 feet to the place of beginning.

EXCEPT a mineral interest and as a royalty interest all oil, gas, hydrocarbons, minerals, valuable metals, and associated substances in, under or produced and saved from said real property together with the right to produce, develop, explore and extract said substances, in the deed to Allan H. Galbreath, an unmarried man, as his separate property, recorded December 7, 1981, Book 811207 Official Records, page 289.
QUIT CLAIM DEED

R. J. Phillips and Clara E. Phillips, husband and wife, transfer to

in consideration of

Dollars, to

in hand paid, the receipt of which is hereby acknowledged, do

hereby convey and grant unto the

in the City of Sacramento

Page 21, No. 11 All that portion of Lot 5 as shown on the official "Plan of Hewitt Subdivision No. 4," recorded in the office of the County Recorder of Sacramento County on January 24, 1914, in Book 14 of Maps, Map No. 55, described as follows:

Beginning at a point on the South line of said Lot 7 and on the center line of Duluth Avenue, a 40-foot wide road, located North 89° 58' East 204.2 feet from the Northwest corner of said Lot 7, thence from said point of beginning North 89° 58' East 405.7 feet along the West line of the aforesaid road to a point; thence along the South line of said Lot 7 to a point; thence South 89° 50' West 645.7 feet along the North line of said Lot 7 to a point; thence South 89° 50' West 645.7 feet to the point of beginning, containing 5.12 acres.

All that portion of Lots 6 and 9 as shown on the official "Plan of Hewitt Subdivision No. 4," recorded in the office of the County Recorder of Sacramento County on January 24, 1914, in Book 14 of Maps, Map No. 55, described as follows:

Beginning at a point in the line between Lots 7 and 8 of said Subdivision, distant South 89° 58' West 301.0 feet from the Northwest corner of said Lot 7, thence South 89° 58' East 405.7 feet to a point on the South line of the aforesaid road; thence South 89° 58' East 405.7 feet to the center line of Duluth Avenue; thence South 89° 58' East 657.1 feet to the point of beginning, containing 0.27 acres.

[Signature]

[Signature]
GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Janet A. Gordon, a Widow

hereby GRANT(S) to

J & L PROPERTIES, A CALIFORNIA GENERAL PARTNERSHIP

the real property in the City of

SACRAMENTO

Sacramento

County of

as State of California, described

LOT 10, AS SHOWN ON THE "PLAT OF HEWITT SUBDIVISION NO. 4", RECORDED IN BOOK 14 OF

MAPS, MAP NO. 55, RECORDS OF SAID COUNTY.

EXCEPT THE EAST 40 FEET LOCATED IN HEWITT AVENUE.

EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS ASPHALTUM MINERALS AND

OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM

THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE, EXPLOR, DEVELOP AND

EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHTS OF SURFACE ENTRY ON THE

SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF.


Dated May 21, 1991

Janet A. Gordon

STATE OF CALIFORNIA

COUNTY OF Sacramento

On May 29, 1991 before

me, Marcia M. Abbott

personally appeared Janet A. Gordon

personally known to me (or proved to me on the basis of satisfactory

evidence) to be the person(s) whose name(s) is/are subscribed to the

within instrument and acknowledged to me that he/she/they executed the

same in his/her/their authorized capacity(ies), and that by his/her/their

signature(s) on the instrument the person(s) or the entity upon behalf of

which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Marcia M. Abbott

OFFICIAL SEAL

MARCIA M. ABBOTT

NOTARY PUBLIC CALIFORNIA

RECEIVED MAY 20, 1991

MAY 21, 1991
DESCRIPTION

THAT REAL PROPERTY SITUATED IN THE CITY OF SACRAMENTO, COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

LOT 10, AS SHOWN ON THE "PLAT OF HEWITT SUBDIVISION NO. 4", RECORDED IN BOOK 14 OF MAPS, MAP NO. 55, RECORDS OF SAID COUNTY.

EXCEPT THE EAST 40 FEET LOCATED IN HEWITT AVENUE.

EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS, ASPHALTUM MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE, EXPLORE, DEVELOP AND EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHTS OF SURFACE ENTRY ON THE SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF.
GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Janet A. Gordon, a Widow

hereby GRANT(S) to

J & L PROPERTIES, A CALIFORNIA GENERAL PARTNERSHIP

the real property in the City of

Sacramento

as

County of

Sacramento

as

LOT 19, AS SHOWN ON THE "PLAT OF HEWITT SUBDIVISION NO. 4". RECORDED IN BOOK 14 OF

MAPS, MAP NO. 55, RECORDS OF SAID COUNTY.

EXCEPT THE EAST 40 FEET LOCATED IN HEWITT AVENUE.

EXCEPTING THEREFROM ALL UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS ASPHALTUM MINERALS AND
OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM
THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE, EXPLORE, DEVELOP AND
EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHTS OF SURFACE ENTRY ON THE
SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF.

See EXHIBIT A

This Deed is being re-recorded to correct the legal description.

Dated May 21, 1991

Janet A. Gordon

STATE OF CALIFORNIA
COUNTY OF Sacramento


personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the
within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature

Marcia H. Abbott

OFFICIAL SEAL
DESCRIPTION

THAT REAL PROPERTY SITUATED IN THE CITY OF SACRAMENTO, COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

LOT 10, AS SHOWN ON THE “PLAT OF HEWITT SUBDIVISION NO. 4”, RECORDED IN BOOK 14 OF MAPS, MAP NO. 55, RECORDS OF SAID COUNTY.
WEST
EXCEPT THE EAST 40 FEET LOCATED IN HEWITT AVENUE.

EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL OIL, ASPHALTUM MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE, EXPLORE, DEVELOP AND EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHTS OF SURFACE ENTRY ON THE SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF.
APN 117-0182-001

GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
JS & LC Investments, a California general partnership

hereby GRANT(S) to

Southpointe Associates

the real property in the City of Sacramento
County of Sacramento

See exhibit "A" attached hereto and made a part hereof

Date: December 20, 1991

STATE OF CALIFORNIA
COUNTY OF:

WITNESS my hand and official seal

JS & LC Investments, a California general partnership

(Signature)

WITNESS my hand and official seal

Mail Tax Statements as Directed Above
STATE OF CALIFORNIA  
COUNTY OF SACRAMENTO  

On 12/24/91 before me, Daniel J. Nottaway, 
personally appeared Jack J. Swigert, 
personally known to me (or proved 
to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within 
instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), 
and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the 
person(s) acted, executed the instrument. 

WITNESS my hand and official seal 

Signature: [Signature]

Notary Public in the State of California 
Commission Expired: [Expire Date]

[Notary Seal]
DESCRIPTION

THAT CERTAIN REAL PROPERTY SITUATED IN THE STATE OF CALIFORNIA,
COUNTY OF SACRAMENTO, UNINCORPORATED AREA, DESCRIBED AS FOLLOWS:

ALL THAT PORTION OF LOTS 8 AND 9 AS SHOWN ON THE OFFICIAL "PLAT OF
HEWITT SUBDIVISION NO. 4", RECORDED IN THE OFFICE OF THE RECORDER
OF SACRAMENTO COUNTY, JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO.
55, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE LINE BETWEEN LOTS 7 AND 8 OF SAID
SUBDIVISION DISTANT SOUTH 89 DEG. 56' WEST 561.0 FEET FROM THE
NORTHWEST CORNER OF SAID LOT 8, SAID POINT OF BEGINNING ALSO BEING
IN THE CENTER LINE OF DULUTH AVENUE RUNNING THENCE SOUTH 20 DEG.
24' EAST 657.1 FEET TO A POINT ON THE SOUTH LINE OF LOT 9 WHICH IS
DISTANT SOUTH 89 DEG. 58' WEST 96.2 FEET FROM THE NORTHEAST CORNER
OF LOT 10 OF SAID SUBDIVISIONS THENCE ALONG THE SOUTH LINE OF SAID
LOT 9, SOUTH 89 DEG. 56' WEST 1081.11 FEET TO THE WEST LINE OF SAID
LOT 9; THENCE NORTH 625.44 FEET TO THE NORTHWEST CORNER OF SAID LOT
8; THENCE ALONG THE CENTER LINE OF DULUTH AVENUE NORTH 89 DEG. 56'
EAST 848.56 FEET TO THE PLACE OF BEGINNING.

EXCEPTING THEREFROM A MINERAL INTEREST AND A ROYALTY INTEREST IN
AND TO ALL OIL, GAS, HYDROCARBONS, MINERALS, VALUABLE METALS AND
ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM SAID
REAL PROPERTY TOGETHER WITH THE RIGHT TO PRODUCE, DEVELOP, EXPLORIE
AND EXTRACT SAID SUBSTANCES, AS RESERVED IN A QUITECLAIM DEED FROM
PEARL O. GALLEY, RECOROED DECEMBER 12, 1981, IN BOOK 8113-12,
PAGE 289, OFFICIAL RECORDS, AND RE-RECOROED OCTOBER 21, 1982, IN
BOOK 8210-21, PAGE 1253, OFFICIAL RECORDS.
APN 117-0182-019

GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

J & L Properties, a California general partnership

hereby GRANT(S) to

Southpointe Associates

the real property in the City of Sacramento

County of Sacramento, State of California, described as

Lot 10, as shown on the "Plan of Hewitt Subdivision No. 4", recorded in Book 14 of maps, Map no. 55, records of said County.

EXCEPT THE WEST 40 FEET LOCATED IN HEWITT AVENUE

EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS, ASPHALTUM MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE, EXPLORE, DEVELOP AND EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHTS OF SURFACE ENTRY ON THE SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF.

Dated: December 20, 1991

STATE OF CALIFORNIA
COUNTY OF SACRAMENTO

In said State and County, before me, the undersigned, a Notary Public in and for said State, personally appeared

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose signature appears above

the same, WITNESS my hand and official seal.

Signature:

MAIL TAX STATEMENTS AS DIRECTED ABOVE

1000 (6/88)
STATE OF CALIFORNIA
COUNTY OF Sacramento

on 12/20/1911 before me, Dr. E. Herr, Notary Pub.,
personally appeared Jack T. Suárez,
personally known to me (or proved
to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within
instrument and acknowledged to me that/his/her they executed the same at his/hers/their authorized capacity(ies),
and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the
person(s) acted, executed the instrument.

WITNESSES my hand and official seal.

(Seal)

(Tamper-evident notary seal)

1001 (5/88)
GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Southpointe Associates hereby GRANT(S) to
J & L Properties, a California general partnership the real property in the City of Sacramento County of Sacramento, State of California, described as Lot 10, as shown on the "Plat of Hewitt Subdivision No. 4", recorded in Book 14 of Maps, Map No. 55, records of said County.

EXCEPTING THEREFROM THE WEST 40 FEET LOCATED IN HEWITT AVENUE.

EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS, ASPHALTUM MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE EXPLORE, DEVELOP AND EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHTS OF SURFACE ENTRY ON THE SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF.

Conveyance as the result of a sale with the consideration less than $100.00

Dated MARCH 24, 1992

STATE OF CALIFORNIA
COUNTY OF

before me, the undersigned, a Notary Public in and for said State, personally appeared:

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same.

WITNESS my hand and official seal.

Signature

Southpointe Associates.
PURPOSE ACKNOWLEDGMENT

State of California
County of Sacramento

On 3/24/92 before me, Daniel H. Hare, Notary Public
personally appeared William L. Green

□ personally known to me - OR - □ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

Witness my hand and official seal.

SIGNATURE OF NOTARY

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent use of this certificate in an unauthorized document.

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED AT RIGHT:

Title or Type of Document: Grant Deed
Number of Pages: 1
Date of Document: 3/24/92

Signer(s) Other Than Named Above:

First American Title Insurance Company
A subsidiary of The First American Financial Corporation
GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

J & L PROPERTIES, a California General Partnership

hereby GRANT(s) to

JANET A. GORDON, a Widow

the real property in the City of Sacramento, County of Sacramento, State of California, described as

Lot 10, as shown on the "plat of Hewitt Subdivision No. 4", recorded in Book 14 of Maps, Map No. 55, records of said County.

EXCEPT THE WEST 40 FEET LOCATED IN HEWITT AVENUE.

EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS, ASPHALTUM MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PROSPECT, EXPLOR, DEVELOP AND EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHTS OF SURFACE ENTRY ON THE SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF.

Property being conveyed for no consideration.

Dated December 18, 1991

J & L PROPERTIES, a California General Partnership

BY: JACK SWEIGERT ASSOCIATES, a California Corporation

BY: Jack M. Sweigert, President
STATE OF CALIFORNIA
COUNTY OF Sacramento

On 12-19-91 before me, Doretius H. Notayoldi, personally appeared, Jack T. Subicart, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]

[Official Seal]
GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged.

SOUTHPONTE ASSOCIATES

hereby GRANT(S) to

JS & LC INVESTMENTS, a California General Partnership

the real property in the City of Sacramento
County of Sacramento

State of California, described as

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF FOR LEGAL DESCRIPTION

This conveyance is to a partnership wherein the grantors are all of the partners of the partnership and hold the same proportionate share in the partnership that they held in the real property.

Dated April 21, 1992

STATE OF CALIFORNIA
COUNTY OF

Js.

On before me, personally appeared

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacities, and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature

(Southpointe Associates)

MAIL TAX STATEMENTS AS DIRECTED ABOVE
State of California
County of Sacramento

On 4/2/1992 before me, [Name of Notary]
public notary, personally appeared [Name of Person]

[Signature of Notary]

[Name of Person]

CAPACITY CLAIMED BY SIGNER

☐ INDIVIDUAL(S)
☐ CORPORATE
○ OFFICER(S) [Title]
☐ PARTNER(S)
☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ SUBSCRIBING WITNESS
☐ GUARDIAN/CONSERVATOR
☐ OTHER:

SIGNER IS REPRESENTING:
[Name of Person or Entity]

[Signature of Person or Entity]

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of the certificate to unauthorized document.

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED AT RIGHT:

Title or Type of Document: [Type of Document]

Number of Pages: 0

Date of Document: 4/2/1992

Signer(s) Other Than Named Above: [Signature]
EXHIBIT "A"

DESCRIPTION

THAT CERTAIN REAL PROPERTY SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF SACRAMENTO, UNINCORPORATED AREA, DESCRIBED AS FOLLOWS:

ALL THAT PORTION OF LOTS 8 AND 9 AS SHOWN ON THE OFFICIAL "PLAT OF HEWITT SUBDIVISION NO. 4", RECORDED IN THE OFFICE OF THE RECORDER OF SACRAMENTO COUNTY, JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE LINE BETWEEN LOTS 7 AND 8 OF SAID SUBDIVISION DISTANT SOUTH 89 DEG. 58' WEST 561.0 FEET FROM THE NORTHWEST CORNER OF SAID LOT 8, SAID POINT OF BEGINNING ALSO BEING IN THE CENTER LINE OF DULUTH AVENUE RUNNING THENCE SOUTH 20 DEG. 24' EAST 667.1 FEET TO A POINT ON THE SOUTH LINE OF LOT 9 WHICH IS DISTANT SOUTH 89 DEG. 58' WEST 96.2 FEET FROM THE NORTHEAST CORNER OF LOT 10 OF SAID SUBDIVISIONS THENCE ALONG THE SOUTH LINE OF SAID LOT 9, SOUTH 89 DEG. 58' WEST 1081.11 FEET TO THE WEST LINE OF SAID LOT 9; THENCE NORTH 625.44 FEET TO THE NORTHWEST CORNER OF SAID LOT 8; THENCE ALONG THE CENTER LINE OF DULUTH AVENUE NORTH 89 DEG. 58' EAST 848.56 FEET TO THE PLACE OF BEGINNING.

EXCEPTING THEREFROM A MINERAL INTEREST AND A ROYALTY INTEREST IN AND TO ALL OIL, GAS, HYDROCARBONS, MINERALS, VALUABLE METALS AND ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM SAID REAL PROPERTY TOGETHER WITH THE RIGHT TO PRODUCE, DEVELOP, EXPLORE AND EXTRACT SAID SUBSTANCES, AS RESERVED IN A QUIET CLAIM DEED FROM
PEARL O. GALBREATH, RECORDED DECEMBER 12, 1961, IN BOOK 8112-12, PAGE 289, OFFICIAL RECORDS, AND RE-RECORDED OCTOBER 21, 1962, IN BOOK 8210-21, PAGE 1253, OFFICIAL RECORDS.
GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged.

JS & LC INVESTMENTS, a California General Partnership

hereby GRANT(S) to
ALLAN H. CALIBREATH, A MARRIED MAN AS TO AN UNDIVIDED 1/2 INTEREST; AND JOHN F.
WHISENHUNT AND GENETTE H. WHISENHUNT, TRUSTEES OF THE WHISENHUNT FAMILY TRUST
DATED FEBRUARY 15, 1989 AS TO AN UNDIVIDED 1/2 INTEREST

the real property in the City of Sacramento
County of Sacramento

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Conveyance is the result of a sale with consideration or value, less liens
and encumbrances remaining at the time of sale, of less than $100.00

Dated April 21, 1992

STATE OF CALIFORNIA
COUNTY OF

On before me,

personally appeared

personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is(are) subscribed to the within
instrument and acknowledged to me that he/she/they executed the same
in his/her/their authorized capacity(ies), and that by his/her/their signa-
ture(s) on the instrument the person(s) or the entity upon behalf of which
the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature

MAIL TAX STATEMENTS AS DIRECTED ABOVE
ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Sacramento

on 4/24/92 before me, Daniel Hen, County Public
NAME, TITLE OF OFFICER - E.G., "JUDGE OF COURT"

personally appeared Jack J. Steiger

✓ personally known to me - OR - □ proved to me on the basis of satisfactory evidence
to be the person(s) whose name(s) is/are

□ subscribed to the within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized
capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s),
or the entity upon behalf of which the person(s)
acted, executed the instrument.

Witness my hand and official seal.

[Signature]

SIGNATURE OF NOTARY

CAPACITY CLAIMED BY SIGNER

□ INDIVIDUAL(S)
□ CORPORATE
□ OFFICER(S)
□ TITLE(S)
□ PARTNER(S)
□ ATTORNEY-IN-FACT
□ TRUSTEE(S)
□ SUBSCRIBING WITNESS
□ GUARDIAN/CONSERVATOR
□ OTHER:

SIGNER IS REPRESENTING:
NAME OF PERSON OR ENTITY(S)

184 L.E. Investments

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraud & attachment of this certificate to unauthorized document.

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED AT RIGHT:

Title or Type of Document: Grant Deed

Number of Pages: 2

Date of Document: 4/24/92

Signer(s) Other Than Named Above: none

© 1991 NATIONAL NOTARY ASSOCIATION - P.O. Box 1161 - Corona, CA 91717-1161
EXHIBIT "A"

DESCRIPTION

THAT CERTAIN REAL PROPERTY SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF SACRAMENTO, UNINCORPORATED AREA, DESCRIBED AS FOLLOWS:

ALL THAT PORTION OF LOTS 8 AND 9 AS SHOWN ON THE OFFICIAL "PLAT OF HEWITT SUBDIVISION NO. 4", RECORDED IN THE OFFICE OF THE RECORDER OF SACRAMENTO COUNTY, JANUARY 24, 1914, IN BOOK 1 OF MAPS, MAP NO. 55, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE LINE BETWEEN LOTS 7 AND 8 OF SAID SUBDIVISION DISTANT SOUTH 89 DEG. 58' WEST 561.0 FEET FROM THE NORTHWEST CORNER OF SAID LOT 8, SAID POINT OF BEGINNING ALSO BEING IN THE CENTER LINE OF DULUTH AVENUE RUNNING THENCE SOUTH 20 DEG. 24' EAST 667.1 FEET TO A POINT ON THE SOUTH LINE OF LOT 9 WHICH IS DISTANT SOUTH 89 DEG. 58' WEST 96.2 FEET FROM THE NORTHEAST CORNER OF LOT 10 OF SAID SUBDIVISIONS THENCE ALONG THE SOUTH LINE OF SAID LOT 9, SOUTH 89 DEG. 58' WEST 1081.11 FEET TO THE WEST LINE OF SAID LOT 9; THENCE NORTH 625.44 FEET TO THE NORTHWEST CORNER OF SAID LOT 8; THENCE ALONG THE CENTER LINE OF DULUTH AVENUE NORTH 89 DEG. 58' EAST 548.56 FEET TO THE PLACE OF BEGINNING.

EXCEPTING THEREFROM A MINERAL INTEREST AND A ROYALTY INTEREST IN AND TO ALL OIL, GAS, HYDROCARBONS, MINERALS, VALUABLE METALS AND ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM SAID REAL PROPERTY TOGETHER WITH THE RIGHT TO PRODUCE, DEVELOP, EXPLOR AND EXTRACT SAID SUBSTANCES, AS RESERVED IN A QUITCLAIM DEED FROM PEARL O. GALEBREATH, RECORDED DECEMBER 12, 1981, IN BOOK 8112-12, PAGE 289, OFFICIAL RECORDS, AND RE-RECORDED OCTOBER 21, 1982, IN BOOK 8210-21, PAGE 1253, OFFICIAL RECORDS.
QUITCLAIN DEED

ALLAN H. GABREATH does hereby remise, release and quitclaim a one-fourth (1/4) interest in the real property described below to ALLAN H. GABREATH, Trustee of the ALLAN H. GABREATH REVOCABLE TRUST, established August 6, 1994 and a one-fourth (1/4) interest in the real property described below to ELIZABETH E. GABREATH, Trustee of the ELIZABETH E. GABREATH REVOCABLE TRUST, established August 6, 1994. Said real property is situated in the County of Sacramento, State of California, described as follows:

SEE ATTACHED EXHIBIT "A"

This transfer is to a Revocable Trust and is exempt from reassessment for property tax purposes pursuant to Section 62 of the Revenue and Taxation Code of the State of California, July 10, 1979.

Assessor Parcel Number: 117-0123-001
Property Address: 7500 Duluth Ave., Elk Grove, CA

DATED this 12th day of August, 1994.

ALLAN H. GABREATH
ELIZABETH E. GABREATH
STATE OF CALIFORNIA
COUNTY OF SACRAMENTO

On August 6, 1994, before me, (here insert name and title of the officer), personally appeared ALLAN H. GABREATH and ELIZABETH H. GABREATH, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacity, and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

Signature ________________________________ (Seal)

W. MORGAN JOHNSON Notary Public
EXHIBIT "A"

That certain real property situated in the State of California, County of Sacramento, unincorporated area, described as follows:

All that portion of Lots 8 and 9 as shown on the official "plat of Hewitt Subdivision No. 4," recorded in the office of the Recorder of Sacramento County, January 24, 1914, in Book 14 of Maps, Map No. 55, described as follows:

BEGINNING at a point in the line between Lots 7 and 8 of said subdivision distant South 89° West 561.0 feet from the Northwest corner of said Lot 8, said point of beginning also being in the center line of Duluth Avenue running thence South 20° 24' East 667.1 feet to a point on the South line of Lot 9 which is distant South 89° 58' West 96.2 feet from the Northeast corner of Lot 10 of said subdivisions thence along the South line of said Lot 9, South 89° 58' West 1081.11 feet to the West line of said Lot 9; thence North 625.44 feet to the Northwest corner of said Lot 9; thence along the center line of Duluth Avenue North 89° 58' East 848.56 feet to the place of beginning.

EXCEPTING THEREFROM a mineral interest and a royalty interest in and to all oil, gas, hydrocarbons, minerals, valuable metals and associated substances in, under or produced from said real property together with the right to produce, develop, explore and extract said substances, as reserved in a Quitclaim Deed from Pearl O. Galbreath, recorded December 12, 1981 in Book 8112-12, page 289, official records and re-recorded October 21, 1982 in Book 8210-21, page 1253, official records.

APN: 117-0182-001
TRUSTEE'S DEED UPON SALE

A.P.N. No. 117-0182-002

The undersigned grantor declares:
1) The grantee herein was the foreclosing beneficiary.
2) The amount of the unpaid debt together with costs was $713,270.42
3) The amount paid by the grantee at the trustee sale was $713,270.42
4) The documentary transfer tax is None
5) Said property is in the City of

and MORTGAGE LENDER SERVICES, INC., A CALIFORNIA CORPORATION

(herein called Trustee), as the duly appointed Trustee under the Deed of Trust hereinafter described, does hereby grant and convey, but without covenant or warranty, express or implied, to
SEA VIEW LUMBER CO., INC., A CALIFORNIA CORPORATION

(herein called Grantee), all of its right, title and interest in and to that certain property situated in the County of SACRAMENTO, State of California, described as follows: SEE EXHIBIT 'A' ATTACHED HERETO

RECITALS:
This conveyance is made pursuant to the powers conferred upon Trustee by that certain Deed of Trust dated 02/02/90 and executed by KEET MERHAN, A SINGLE MAN

as Trustor, and recorded 02/22/90 as Instrument No. in book 90 02 22 page 1062 of Official Records of SACRAMENTO County, California, and after fulfillment of the conditions specified in said Deed of Trust authorizing this conveyance.

Continued on page 2

(PATREDA)
Default occurred as set forth in a Notice of Default and Election to Sell which was recorded in the office of the Recorder of said County.

All requirements of law regarding the mailing of copies of notices or the publication of a copy of the Notice of Default or the personal delivery of the copy of the Notice of Default and the posting and publication of copies of the Notice of Sale have been complied with.

Said property was sold by said Trustee at public auction on 09/10/96 at the place named in the Notice of Sale, in the County of SACRAMENTO, California, in which the property is situated. Granted, being the highest bidder at such sale, became the purchaser of said property and paid therefor to said trustee the amount bid being $713,270.42 in lawful money of the United States, or by the satisfaction, pro tanto, of the obligations then secured by said Deed of Trust.

Date: 09/11/96

MORTGAGE LENDER SERVICES, INC.
as Trustee

[Signature]
Marshala Townsend, President

[Signature]

STATE OF CALIFORNIA
COUNTY OF SACRAMENTO

On 9/10/96 before me, Susan Shields, a Notary Public in and for said county, personally appeared Marshala Townsend, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) has/have subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]
Susan Shields
Notary Public in and for said County and State

(CATRUD18) - Page 3 -
EXHIBIT "A"

THE LAND REFERRED TO IN THIS GUARANTEE IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF SACRAMENTO, CITY OF SACRAMENTO, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF LOTS 8 AND 9 OF HEWITT SUBDIVISION NO. 4, ACCORDING TO THE OFFICIAL PLAT THEREOF, FILED IN THE OFFICE OF THE RECORDER OF SACRAMENTO COUNTY, CALIFORNIA, ON JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55, RECORDS OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIPE MARKING THE SOUTHEAST CORNER OF SAID LOT 9 AND RUNNING THENCE SOUTH 88 DEG. 38' WEST 461.0 FEET TO AN IRON PIPE MARKING THE NORTHEAST CORNER OF LOT 10 OF SAID SUBDIVISION; THENCE SOUTH 89 DEG. 58' WEST ALONG THE DIVISION LINE BETWEEN SAID LOTS 9 AND 10, A DISTANCE OF 56.7 FEET; THENCE NORTH 20 DEG. 24' WEST 667.1 FEET TO THE NORTH LINE OF SAID LOT 8; SAID LINE BEING THE CENTER OF DULUTH AVENUE; THENCE NORTH 89 DEG. 58' EAST ALONG THE CENTER LINE OF SAID AVENUE, 661.0 FEET TO THE NORTHEAST CORNER OF SAID LOT 8; THENCE SOUTH 20 DEG. 24' EAST ALONG THE EAST LINE OF SAID LOTS 8 AND 9 TO THE PLACE OF BEGINNING.


AND ALSO EXCEPTING THEREFROM AN UNDIVIDED 1/2 INTEREST IN ALL OIL, GAS, ASPHALTUM MINERALS AND OTHER HYDROCARBON SUBSTANCES IN OR ON SAID LAND, BELOW A DEPTH OF 500 FEET FROM THE SURFACE OF SAID LAND, TOGETHER WITH THE RIGHT TO PRODUCE, EXPLORE, DEVELOP AND EXTRACT SAID SUBSTANCES BUT WITHOUT, HOWEVER, THE RIGHT OF SURFACE ENTRY ON THE SURFACE OF SAID LAND OR WITHIN SAID 500 FEET FROM THE SURFACE THEREOF, AS RESERVED BY CHARLES R. GORDON AND JANET A. GORDON, IN THE DEED RECORDED OCTOBER 26, 1979 IN BOOK 7910-24 OFFICIAL RECORDS, PAGE 408.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PROPERTY:

A PORTION OF LOT 8 OF THE PLAT ENTITLED "HEWITT SUBDIVISION NO. 4", FILED IN THE OFFICE OF THE RECORDER OF SACRAMENTO COUNTY, STATE OF CALIFORNIA, ON JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55, LOCATED IN THE CITY AND COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

LEGAL DESCRIPTION CONTINUED
LEGAL DESCRIPTION CONTINUED

BEGINNING AT A 1" IRON PIPE ON THE SOUTHERLY LINE OF LOT 7 OF SAID "HEWITT SUBDIVISION NO. 4", AT THE NORTHEAST CORNER OF SAID LOT 8; THENCE ALONG THE EASTERLY LINE OF SAID LOT 8, S. 21° 05' 41" E. 184.93 FEET; THENCE N. 74° 25' 56" W., 53.61 FEET; THENCE N. 8° 59' 22" E., 25.67 FEET TO THE LINE COMMON TO SAID LOTS 7 AND 8; THENCE ALONG LAST SAID LINE, N. 89° 24' 51" E., 441.36 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING:

A PORTION OF LOT 1 OF THE PLAT ENTITLED "HEWITT SUBDIVISION NO. 4", FILED IN THE OFFICE OF THE RECORDER OF SACRAMENTO COUNTY, CALIFORNIA, ON JANUARY 24, 1914, IN BOOK 14 OF MAPS, MAP NO. 55, LOCATED IN THE CITY AND COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT A 1" IRON PIPE ON THE SOUTHERLY LINE OF LOT 7 OF SAID "HEWITT SUBDIVISION NO. 4", AT THE NORTHEAST CORNER OF SAID LOT 8; THENCE ALONG THE LINE COMMON TO SAID LOTS 7 AND 8, S. 89° 24' 51" W., 441.36 FEET TO THE POINT OF BEGINNING; THENCE S 8° 59' 25" W., 25.67 FEET; THENCE N. 74° 25' 56" W., 90.97 FEET TO THE LINE COMMON TO SAID LOTS 7 AND 8; THENCE ALONG LAST SAID LINE, N. 89° 24' 51" E., 91.65 FEET TO THE POINT OF BEGINNING.

APN: 117-0182-002
BARE LAND
Grant Deed
REALTY NOT SOLD

The undersigned Grantor(s) declare(s) under penalty of perjury that the following is true and correct:
Documentary transfer tax is $ None - P & T 11911: Consideration less than $100; conveyance
☐ Computed on full value of property conveyed, or transfers Grantor's interest to her revocable
Living trust
☐ Computed on full value less value of land and encumbrances remaining at time of sale.
☐ Unincorporated area: City of __________ Sacramento

For a valuable consideration, receipt of which is hereby acknowledged, JANET A. GORDON, a
married woman, dealing with her sole and separate property

hereby GRANT(s) to JANET A. GORDON, and successors in trust, as Trustee of the
JANET A. GORDON TRUST dated December 20, 1996

the following described real property in the City of Sacramento,
County of Sacramento, State of California:

SEE EXHIBIT A, WHICH IS ATTACHED HERETO AND INCORPORATED HEREIN BY THIS
REFERENCE FOR REAL PROPERTY DESCRIPTION

APN: Parcel I: 031-0860-003-0000
Parcel II: 031-0860-004-0000
Parcel III: 117-0182-019-0000

Dated ________________

State of California
County of Sacramento

On ________________

before me, FRED B. OLIVER - Notary Public

personally appeared JANET A. GORDON

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are
stated in the within instrument and acknowledged to me that he/she/they executed the same in his/her/their
authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of
which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature __________________________

Title Order No. __________

MAIL TAX
STATEMENTS TO JANET A. GORDON, Trustee 7360 Pocket Road, Sacramento, CA 95831
EXHIBIT A

PARCEL I:

All that real property situate in the City of Sacramento, County of Sacramento, State of California, described as follows:

All that portion of Tract 2, as said tract is shown and delineated on that certain plat of the resurvey and subdivision of Swamp Land Survey 147, filed in the office of the County Recorder of Sacramento County on December 26, 1905, in Book 6 of Maps, Map No. 36, described as follows:

Beginning at a point on the center line of Pocket Road, a City Street, from which an iron pipe monument designated "Iron Pipe No. 1" on that certain map or plat entitled "Amended Plat of Land Owned by Estate of Maria J. Williams", filed October 27, 1939, in Book 3 of Survey, Map No. 137, Sacramento County Records, bears North 23° 17' West 346.15 feet along said center line of said City Street to the point of intersection of said center line and the Northerly boundary line of said Tract 2, thence continuing along said center line North 23° 17' West 758.10 feet, and thence North 16° 45' 20" West 225.00 feet; thence from said point of beginning South 67° 30' West 573.00 feet; thence South 28° 00' East 90.00 feet; thence South 40° 30' East 76.00 feet; thence South 61° 00' 18" West 260.12 feet to a point on the Westerly boundary of said Tract 2 and on the left or East bank of the Sacramento River; thence along said East bank South 31° 43' 40" East 145.17 feet and South 32° 31' 40" East 181.36 feet, more or less, to the Northwesterner corner of that 3.61 Acre Parcel conveyed to Gerald L. Wiley and Helen Wiley, his wife, by Joseph L.
Silva and Isabel F. Silva, his wife, by deed dated December 17, 1969, recorded in Book 69-12-23 of Official Records at page 339, Sacramento County Records; thence North 60° 18' 20" East 756.16 feet, more or less, along the Northerly boundary of said 3.61 Acre Parcel to a point on the center line of said City Street; and thence North 23° 17' West 416.53 feet, more or less, along said center line to the point of beginning.

APN 031-0860-003-0000

PARCEL II:

All that real property situate in the city of Sacramento, County of Sacramento, State of California, described as follows:

All that portion of Tract 2 of Swamp Land Survey 147, as shown on the "Plat of Land Owned by F. H. & C. F. Vehmeyer" recorded in the office of the County Recorder of Sacramento County, on December 26, 1905, in Book 6 of Maps, Map No. 36, which lies Westerly of the centerline of the County Road shown on said Plat.

EXCEPTING THEREFROM all that portion of said Tract 2 described as follows:

Beginning at a point from which an iron pipe monument designated "Iron Pipe No. 1" on that certain map or plat entitled "Amended Plat of Land Owned by Estate of Maria J. Williams", filed October 27, 1939, in Book 3 of Surveys, Map No. 137, Sacramento County Records bears North 23° 17' West 758.10 feet along the centerline of a County Road, and thence North 16° 45' 20" West 225.00 feet. Said point of beginning being the intersection of the centerline of a County Road and
the Northerly boundary line of said
Tract 2; thence from said point of
beginning South 23° 17' East 348.15
feet along the centerline of said
County Road; thence leaving said
County Road South 67° 30' West
600.00 feet; thence South 80° 12'
20' West 167.82 feet; thence South
55° 36' 20' West 75.65 feet to a
point on the left or East bank of
the Sacramento River; thence along
said bank North 34° 23' 40' West
254.54 feet to the Northwest corner
of said Tract 2, North 62° 29' East
688.84 feet to the point of
beginning.

FURTHER EXCEPTING THEREFROM all
that portion of said Tract 2,
described as follows:

Beginning at a point on the center
line of Pocket Road, a City Street,
from which an iron pipe monument
designated "Iron Pipe No. 1" on
that certain map or plat entitled
"Amended Plat of Land Owned by
Estate of Maria J. Williams", filed
October 27, 1939, in Book 3 of
Survey, Map No. 137, Sacramento
County Records, bears North 23° 17'
West 348.15 feet along said center
line of said City Street to the
point of intersection of said
center line and the Northerly
boundary line of said Tract 2,
thence continuing along said center
line North 23° 17' West 758.10
feet, and thence North 18° 45' 20'
West 225.00 feet; thence from said
point of beginning South 67° 30'
West 573.00 feet; thence South 28'
00' East 90.00 feet; thence South
40' 30' East 76.00 feet; thence
South 61° 00' 18' West 260.12 feet
to a point on the Westerly boundary
of said Tract 2 and on the left or
East bank of the Sacramento River;
thence along said East bank South
31° 43' 40' East 145.17 feet and
South 32° 31' 40' East 161.36 feet,
more or less, to the Northerly
corner of that 3.61 Acre Parcel conveyed to Gerald L. Wiley and Helen Wiley, his wife, by Joseph L. Silva and Isabel F. Silva, his wife, by deed dated December 17, 1969, recorded in Book 69-12-23 of Official Records at page 339, Sacramento County Records; thence North 60° 18' 20" East 756.16 feet, more or less, along the Northerly boundary of said 3.61 Acre Parcel to a point on the center line of said City Street; and thence North 23° 17' West 418.53 feet, more or less, along said center line to the point of beginning.

TOGETHER WITH a right of way for road purposes over and across the Northerly 20 feet of the property described as follows:

All that portion of Tract 2, as said tract is shown and delineated on that certain plat of the resurvey and subdivision of Swamp Land Survey 147, filed in the office of the County Recorder of Sacramento County on December 26, 1965, in Book 6 of Maps, Map No. 36, described as follows:

Beginning at a point on the center line of Pocket Road, a city street, from which an iron pipe monument designated "Iron Pipe No. 1", on that certain map or plat entitled "Amended Plat of Land Owned by Estate of Maria J. Williams", filed October 27, 1939, in Book 3 of Survey, Map No. 137, Sacramento County Records, bears North 23° 17' West 348.15 feet along said center line of said City Street to the point of intersection of said center line and the Northerly boundary line of said Tract 2, thence continuing along the said center line North 23° 17' West 758.10 feet, and thence North 18° 45' 20" West 225.00 feet; thence from said point of beginning South
67'10" West 573.00 feet; thence
South 28' 00" East 90.00 feet;
thence South 40' 30" East 76.00
feet; thence South 61' 00' 18" West
260.12 feet to a point on the
Westerly boundary of said Tract 2
and on the left or East bank of the
Sacramento River; thence along said
East bank South 31' 43' 40" East
145.17 feet and South 32' 32' 40" East
181.36 feet, more or less, to the
Northerly corner of that
3.61 Acre Parcel conveyed to Gerald
L. Wiley and Helen Wiley, his wife,
by Joseph L. Silva and Isabel F.
Silva, his wife, by deed dated
December 17, 1969, recorded in Book
69 12 23, of Official Records at
page 339, Sacramento County
Records; thence North 60' 18' 20"
East 756.16 feet more or less,
along the Northerly boundary of
said 3.61 AcreParcel to a point on the
centerline of said City Street;
and thence North 23' 17' West 418.53
feet, more or less, along said
center line to the point of
beginning.

APN 031-0860-004-0000

PARCEL III:

All that real property situate in the City
of Sacramento, County of Sacramento, State
of California, described as follows:

Lot 10, as shown on the "Plat of
Hewitt Subdivision No. 4", recorded
in Book 14 of Maps, Map No. 55,
records of said County.

EXCEPT the West 40 feet located in
Hewitt Avenue.

EXCEPTING THEREFROM an undivided
1/2 interest in all oil, gas,
asphaltum minerals and other
hydrocarbon substances in or on
said land, below a depth of 500
feet from the surface of said land,
together with the right to produce, explore, develop and extract said substances but without, however, the right of surface entry on the surface of said land or within said 500 feet from the surface thereof.

APN 117-0182-019-0000
GRANT DEED

THE UNDERSIGNED GRANTOR(S) DECLARE(S):

DOCUMENTARY TRANSFER TAX IS $82.50

[X] computed on full value of property conveyed, or

[] computed on full value less value of liens or encumbrances remaining at time of sale.

[ ] Unincorporated area  

[X] City of Sacramento

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

CHARLES F. CLARK and GLORIA J. CLARK, Husband and Wife

hereby GRANT(S) to:

JEFFREY PAUL GRIFFIN, a Single Man

the real property in the City of Sacramento, County of Sacramento, State of California, described as:

LEGAL DESCRIPTION ATTACHED HERETO AS EXHIBIT A AND MADE A PART HEREOF

Dated June 2, 1998

CHARLES F. CLARK

GLORIA J. CLARK

This is sworn to before me, a Notary Public in and for said State, personally appeared

CHARLES F. CLARK

GLORIA J. CLARK

person(s) known to me (or proved to me on the basis of satisfied evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Suzanne Muniz

Notary Public

COMMISSION NO. 11252518

NOTARY PUBLIC - CALIFORNIA

ALAMEDA COUNTY

My commission expires May 03, 2006

[This area for official notarial seal]
The land referred to in this Report is situated in the State of California, County of Sacramento, City of Sacramento, and is described as follows:

All that portion of Lot 11, as shown on the "Plat of Hewitt Subdivision No. 4", recorded in Book 14 of Maps, Map No. 55, records of said County, described as follows:

Beginning at the Northwest corner of said Lot 11, said corner being a point on the centerline of a county road known as Hewitt Avenue; thence, from said point of beginning, along the North line of said Lot 11 East 260 feet; thence, South, and parallel with the West line of said Lot 11, 140 feet; thence, West, and parallel with the North line of said Lot 11, 260 feet to a point on the centerline of said county road; thence, along said centerline and the West line of said Lot 11, North 140 feet to the point of beginning and excepting therefrom any portion thereof, included in any road.

APN: 117-0182-020

EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF AS THE LEGAL DESCRIPTION.
APPENDIX E

PHASE I ENVIRONMENTAL SITE ASSESSMENT
COLLEGE MARKETPLACE
SWC OF HIGHWAY 99 AND CONSUMNES RIVER BOULEVARD
SACRAMENTO COUNTY, CALIFORNIA
APN: 117-0182-1, -19, -20, -21, -24, -28

ENVIRONMENTAL QUESTIONNAIRE
5. Introduction to Transaction Screen Questionnaire

5.1 Process—The transaction screen process consists of asking questions contained within the transaction screen questionnaire of owners and occupants of the property, observing site conditions at the property with direction provided by the transaction screen questionnaire, and, to the extent reasonably ascertainable, conducting limited research regarding certain government records and certain standard historical sources. The questions asked of owners when conducting site visits are the same questions as those asked of occupants.

5.2 Guide—The transaction screen questionnaire is followed by a guide designed to assist the person completing the transaction screen questionnaire. The guide to the transaction screen questionnaire is set out in Sections 7 through 10 of this practice. The guide is divided into three sections: Guide for Owner/Occupant Inquiry, Guide to Site Visit, and Guide to Government Records/Historical Sources Inquiry.

5.2.1 To assist the user, its employee or agent, or the environmental professional in preparing a report, the guide repeats each of the questions set out in the transaction screen questionnaire in both the guide for owner/occupant inquiry and guide to site visit. The questions regarding government records/historical sources inquiry are also repeated in the guide to that section.

5.2.2 The guide also describes the procedures to be followed to determine if reliance upon the information in a prior environmental site assessment is appropriate under this practice.

5.2.3 A user, its employee or agent, or environmental professional conducting the transaction screen process should not use the transaction screen questionnaire without reference to, or familiarity from prior usage with, the guide.

5.3 User and Preparer—The user conducting the transaction screen process is the party seeking to perform appropriate inquiry with respect to the property. The user may delegate the preparation of the transaction screen questionnaire to an employee or agent of the user or may contract with a third party to prepare the questionnaire on behalf of the user. The person preparing the questionnaire, who may be either the user or the person to whom the user has delegated the preparation of the transaction screen questionnaire.

5.4 Exercise of Care—The preparer conducting the transaction screen process should use good faith efforts in determining answers to the questions set forth in the transaction screen questionnaire. The user should take time and care to check whatever records are in the user’s possession. The preparer should ask all persons to whom questions are directed to give answers to the best of the respondent’s knowledge. As required by Section 901(35)(B) of CERCLA, the user or preparer should discuss with a responsible person in authority in the user’s organization (if any) any specialized knowledge or experience relating to hazardous substances on the property and the preparer should understand such information.

5.5 Knowledge—The owner or occupant of the property to which portions of the transaction screen questionnaire are directed should have sufficient knowledge and experience with respect to the property or in the owner’s or occupant’s particular business to understand the purpose and use of the transaction screen questionnaire. All answers should be given to the best of the owner’s or occupant’s actual knowledge.

5.5.1 While the person conducting the transaction screen process has an obligation to ask the questions set forth in the transaction screen questionnaire, in many instances the parties to whom the questions are addressed will have no obligation to answer them. The user is only required to obtain information to the extent it is reasonably ascertainable.

5.5.2 If the preparer asks the questions set forth in the transaction screen questionnaire, but does not receive any response or receives partial responses, the questions will be deemed to have been answered provided the questions have been asked, or were attempted to be asked, in person or by telephone and written records have been kept of the person to whom the questions were addressed and their responses, or the questions have been asked in writing sent by certified or registered mail, return receipt requested, postage prepaid, or by private, commercial overnight carrier and no responses have been obtained after at least two follow-up telephone calls were made or written request was sent again asking for responses.

5.5.3 The transaction screen questionnaire and the transaction screen guide sometimes include the phrase “to the best of your knowledge.” Use of this phrase shall not be interpreted as imposing a constructive knowledge standard when it is not included or as imposing anything other than an actual knowledge standard for the person answering the questions, regardless of whether it is used. It is sometimes included as an assurance to the person being questioned or she is not obligated to search out information he or she does not currently have in order to answer the particular question.

5.6 Conclusions Regarding Affirmative or Unknown Answers—If any of the questions set forth in the transaction screen questionnaire are answered in the affirmative, the user must document the reason for the affirmative answer. If any of the questions are not answered or the answer is unknown, the user should document such nonresponse or answer of unknown and evaluate it in light of the other information obtained in the transaction screen process, including, in particular, the site visit and the government records/historical sources inquiry. If the user decides no further inquiry is warranted after receiving no response, an answer of unknown or an affirmative answer, the user must document the reasons for any such conclusion.

5.6.1 Upon obtaining an affirmative answer, an answer of unknown or no response, the user should first refer to the guide. The guide may provide sufficient information to allow the user to conclude that no further inquiry is appropriate with respect to the particular question.

5.6.2 If the guide to a particular question does not, in itself, permit a user to conclude that no further inquiry is appropriate, then the user should consider other information obtained from the transaction screen process relating to this question. For example, while on the site performing a site visit, a person may find a storage tank on the property and therefore answer Question 10 of the transaction screen questionnaire affirmatively. However, during or subsequent to the owner/occupant inquiry, the owner may produce evidence that substances now or historically contained in the tank (e.g., water) are not likely to cause contamination.

5.6.3 If either the guide to the question or other information obtained during the transaction screen process does not permit a user to conclude no further inquiry is appropriate with respect to such question, then the user must determine, in the exercise of the user’s reasonable business judgment, based upon the totality of the information obtained from each component of the transaction screen process, and consider whether sufficient information has been obtained to conclude that no further inquiry is necessary. The user must determine, in the exercise of the user’s reasonable business judgment, the scope of such further inquiry: whether to proceed with a Phase I Environmental Site Assessment prepared in accordance with Practice E 1527 or a lesser inquiry directed at specific issues raised by the questionnaire.

5.7 Presumption—A presumption exists that further inquiry is necessary if an affirmative answer is given to a question because the answer was unknown or no response was given. In rebutting this presumption, the user should evaluate information obtained from each component of the transaction screen process and consider whether sufficient information has been obtained to conclude that no further inquiry is necessary. The user must determine, in the exercise of the user’s reasonable business judgment, the scope of such further inquiry: whether to proceed with a Phase I Environmental Site Assessment prepared in accordance with Practice E 1527 or a lesser inquiry directed at specific issues raised by the questionnaire.

5.8 Further Inquiry Under Practice E 1527—Upon completing the transaction screen questionnaire, if the user concludes that a Phase I Environmental Site Assessment is needed, the user should proceed with such inquiry with the advice and guidance of an environmental professional. Such further inquiry should be undertaken in accordance with Practice E 1527.

5.9 Signature—The user and the preparer of the transaction screen questionnaire must complete and sign the questionnaire as provided at the end of the questionnaire.
6. Transaction Screen Questionnaire

6.1 Persons to be Questioned——The following questions should be asked of (1) the current owner of the property, (2) any major occupant of the property or, if the property does not have any major occupants, at least 10% of the occupants of the property, and (3) in addition to the current owner and the occupants identified in (2), any occupant likely to be using, treating,generating, storing or disposing of hazardous substances or petroleum products on or from the property. A major

occupant is any occupant using at least 40% of the leasable area of the property or any anchor tenant when the property is a shopping center. In a multifamily property containing both residential and commercial uses, the preparer does not need to ask questions of the residential occupants. The preparer should ask each person to answer all questions to the best of the respondent’s actual knowledge and in good faith. When completing the site visit column, the preparer should be sure to observe the property and any buildings and other structures on the property. The guide provides further details on the appropriate use of this questionnaire.

Description of Site: Address:

<table>
<thead>
<tr>
<th>Question</th>
<th>Owner</th>
<th>Occupants (if applicable)</th>
<th>Observed During Site Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the property or any adjoining property used for an industrial use?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2. To the best of your knowledge, has the property or any adjoining property been used for an industrial use in the past?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Is the property or any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>4. To the best of your knowledge, has the property or any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Are there currently, or to the best of your knowledge have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the property or at the facility?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Are there currently, or to the best of your knowledge have there been previously, any industrial drums (typically 55 gal (208 L)) or sacks of chemicals located on the property or at the facility?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Has fill dirt been brought onto the property that originated from a contaminated site or that is of an unknown origin?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Are there currently, or to the best of your knowledge have there been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>9. Is there currently, or to the best of your knowledge has there been previously, any stained soil on the property?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>10. Are there currently, or to the best of your knowledge have there been previously, any registered or unregistered storage tanks (above or underground) located on the property?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>11. Are there currently, or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>12. Are there currently, or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

\(^1\) Unk = "unknown" or "no response"

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This document is an excerpt of E 1328-92: Standard Practice for Environmental Site Assessments: Transaction Screen Process, which is under the jurisdiction of ASTM Committee E-50 on Environmental Assessment and is the direct responsibility of Subcommittee E 50.02 on Commercial Real Estate Transactions. This questionnaire represents only items 5.1 through 6.1 of E 1328-92 and should not be construed as being the complete standard. It is necessary to refer to the full standard prior to using this questionnaire. For the complete standard, or to order additional copies of this questionnaire, contact ASTM Customer Service at (215) 299-5883.
<table>
<thead>
<tr>
<th>Question</th>
<th>Owner</th>
<th>Occupants (if applicable)</th>
<th>Observed During Site Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?</td>
<td>Yes</td>
<td>No Unk</td>
<td>Yes No Unk</td>
</tr>
<tr>
<td>14. Does the owner or occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?</td>
<td>Yes</td>
<td>No Unk</td>
<td>Yes No Unk</td>
</tr>
<tr>
<td>15. Has the owner or occupant of the property been informed of the past or current existence of hazardous substances or petroleum products or environmental violations with respect to the property or any facility located on the property?</td>
<td>Yes</td>
<td>No Unk</td>
<td>Yes No Unk</td>
</tr>
<tr>
<td>16. Does the owner or occupant of the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?</td>
<td>Yes</td>
<td>No Unk</td>
<td>Yes No Unk</td>
</tr>
<tr>
<td>17. Does the owner or occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property?</td>
<td>Yes</td>
<td>No Unk</td>
<td>Yes No Unk</td>
</tr>
<tr>
<td>18. Does the property discharge wastewater on or adjacent to the property other than storm water into a sanitary sewer system?</td>
<td>Yes</td>
<td>No Unk</td>
<td>Yes No Unk</td>
</tr>
<tr>
<td>19. To the best of your knowledge, have any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned, on the property?</td>
<td>Yes</td>
<td>No Unk</td>
<td>Yes No Unk</td>
</tr>
<tr>
<td>20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?</td>
<td>Yes</td>
<td>No Unk</td>
<td>Yes No Unk</td>
</tr>
</tbody>
</table>

**Government Records/Historical Sources Inquiry**
(See guide, Section 10 of ASTM E 1528-93)

21. Do any of the following Federal government record systems list the property or any property within the circumference of the area noted below:

- National Priorities List (NPL)—within 1.0 mile (1.6 km)?
  - Yes
  - No

- CERCLIS List—within 0.5 mile (0.8 km)?
  - Yes
  - No

- RCRA TSD Facilities—within 1.0 mile (1.6 km)?
  - Yes
  - No

22. Do any of the following state record systems list the property or any property within the circumference of the area noted below:

- List maintained by state environmental agency of hazardous waste sites identified for investigation or remediation that is the state agency equivalent to NPL—within approximately 1.0 mile (1.6-km)?
  - Yes
  - No

- List maintained by state environmental agency of sites identified for investigation or remediation that is the state equivalent to CERCLIS within 0.5 mile (0.8 km)?
  - Yes
  - No

- Leaking Underground Storage Tank (LUST) List—within 0.5 mile (0.8 km)?
  - Yes
  - No

- Solid Waste/Landfill Facilities—within 0.5 mile (0.8 km)?
  - Yes
  - No

23. Based upon a review of fire insurance maps or consultation with the local fire department serving the property, all as specified in the guide, are any buildings or other improvements on the property or on an adjoining property identified as having been used for an industrial use or uses likely to lead to contamination of the property? Yes No N/A
The preparer of the transaction screen questionnaire must complete and sign the following statement. (For definition of preparer and user, see 5.3 or 3.3.25 of ASTM E 1528-93.)

This questionnaire was completed by:

Name ____________________________
Title ____________________________
Firm ____________________________
Address __________________________

Phone number ______________________
Date ______________________________

If the preparer is different than the user, complete the following:

Name of user _______________________
User's address ______________________
User's phone number __________________
Preparer's relationship to site _________
Preparer's relationship to user _________
(for example, principal, employee, agent, consultant)

Copies of the completed questionnaire have been filed at:

____________________________________________
____________________________________________
____________________________________________

Copies of the completed questionnaire have been mailed or delivered to:

____________________________________________
____________________________________________
____________________________________________

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

Signature __________________________ Date ______________
Signature __________________________ Date ______________
Signature __________________________ Date ______________

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DRAFT

SB 610

Water Supply Assessment

For

College Square PUD Project

July 2003

Prepared for:
City of Sacramento

Prepared by:
EDAW Inc.
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Sacramento, CA 95814
(916) 414-5800

240 East Mountain Avenue
Fort Collins, CO 80524
(970) 484-6073
Job No. 1T157.02
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1. Background

In 1995, the State of California enacted Senate Bill (SB) 901, which amended provisions of CEQA, the Government Code (relating to subdivision approval) and the Water Code (relating to Urban Water Management Plans). The bill was intended to ensure coordination during the land use planning process between water suppliers and local land use planning agencies (i.e., cities and counties) when considering certain large-scale development projects.

SB 901 established two mechanisms to link water supply availability and development approvals. First, it made certain changes to the requirements for urban water suppliers to prepare Urban Water Management Plans (UWMP) that contain detailed information regarding their supplies. Second, it obligated cities and counties to request a Water Supply Assessment (WSA) from all potential suppliers of water for any large project requiring an EIR pursuant to CEQA.

Under SB 901, a city or county is required to obtain a WSA whenever it receives an application for approval of a development project that is subject to CEQA and proposes a residential development of more than 500 units, or other type of development having a similar impact on water supplies. The bill also amended CEQA to require cities and counties to incorporate the procedures set forth in SB 901 into their CEQA review process. Finally, it amended state planning and zoning law to require local governments to work with water agencies when they propose to adopt or amend a general plan.

In January 2001, the State of California adopted SB 610, which amended the SB 901 provisions (and §10910 of the Water Code) with respect to UWMPs and WSAs. For WSAs, SB 610 clarified when a WSA is required and what information it must contain. SB 610 requires consideration of water supplies for proposed developments of more than 500 dwelling units/dwelling unit equivalents, or other projects, as defined by SB610. The analysis is required to consider the proposed project as well as other anticipated growth in the water supplier’s service area. The content requirements for a WSA include, but are not limited to, identification of existing and future water supplies of the water supplier, quantification of water demand and supply by source in 5-year increments over a 20-year period, description of groundwater conditions if groundwater is to serve as the major source of water, and a determination of whether adequate water supplies will be available over that 20-year period to serve the project, including under drought considerations, given other anticipated demands for water within the water supplier’s service area. SB 610 indicates that the water supplier’s UWMP can be used as a primary source of the information required in the WSA.
The proposed College Square project includes 724 residential units and 270,256 square feet of commercial/office/child care uses. This exceeds the 500 dwelling units/dwelling unit equivalents threshold under SB 610, and thus the preparation of a WSA is required as part of the CEQA process for the project. For this effort, and under the provisions of SB610, the City of Sacramento (City) is identified as both the water supplier and the lead agency for the project. Once the WSA has been prepared, the City, as the water supplier, is required to consider preparation of a Written Verification (WV) of water supply adequacy for inclusion in the administrative record for the project (assuming that the WSA makes this determination), and will adopt the WSA if the EIR is certified and the project is approval.

2. Site Location and Description

2.1. Project Location
The project site is located within the southern part of the City of Sacramento (within the South Sacramento Community Plan area). The site consists of approximately 63 gross acres at the southeast corner of Cosumnes River Boulevard and Bruceville Road. The site is identified as Assessor’s Parcel Number(s) (APNs): 117-0182-001, 003, 019, 020, 021, 024, 025, 028, 029, 030, and 117-0184-001 and 002. See Appendix A: Regional Setting Map and Appendix B: Local Setting Map for reference to the project location.

2.2. Existing Land Use
The project site is currently vacant land, once used for agriculture. To the north of the site are a senior citizen apartment complex, a single-family residential subdivision and vacant land. South of the site is large-lot single-family residential and vacant land. To the east is State Route 99, and to the west is Cosumnes River College. The existing zoning designations for the site are office, limited commercial, highway commercial review and multi-family review.

2.3. Proposed Development
The proposed development consists of a total of 724 multifamily residential units and 270,256 square feet of commercial/office/child care uses. A schematic diagram, as well the existing and proposed utility layouts, are provided in Appendix C: Utilities Map.

3. Water Demand

3.1. Existing Site Water Demand
The site is currently vacant. There is no demand for water on the site.
3.2. Future Water Demand for the City

Future water demand for the City of Sacramento is calculated in the City’s Urban Water Management Plan 2000 (UWMP). Calculations of future demand are based on estimated unit water use factors for a variety of land uses as planned by the City in the City’s General Plan. Future water demand for the City is presented in Table 1.

Table 1. Future City Water Demand

<table>
<thead>
<tr>
<th>Year</th>
<th>Projected Water Use (acre-ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>136,776</td>
</tr>
<tr>
<td>2005</td>
<td>150,198</td>
</tr>
<tr>
<td>2010</td>
<td>163,123</td>
</tr>
<tr>
<td>2015</td>
<td>172,824</td>
</tr>
<tr>
<td>2020</td>
<td>175,819</td>
</tr>
</tbody>
</table>


3.3. Future Site Water Demand Assumed in the UWMP

Demand for the entire City of Sacramento is calculated based on City of Sacramento General Plan land use designations and unit water use factors for those land uses. Land use designation of the College Square site under the 1993 General Plan is low density residential. The water demand factor for low density residential is 2.8 acre-feet of water per year per acre. See Table 2 for a summary of calculations.

Table 2. Water Demand Accounted for in General Plan

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Gross Acres</th>
<th>Water use per acre</th>
<th>System Loss Factor</th>
<th>Consumption (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Density Residential</td>
<td>63</td>
<td>2.8</td>
<td>ac-ft/(ac-yr)</td>
<td>0.075</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Discussion with Dan Sherry, City of Sacramento Utilities Department Supervising Engineer July 14, 2003

Zoning of the property has changed since the 1993 General Plan to medium density residential. Medium density residential allows for the development of 16-29 dwelling units per acre. Based on City water use factors, provided by Glen Marshal of the City of Sacramento Department of Utilities, Engineering Services/Development Review Division, the development would have been expected to generate 250,650 gallons per day (gpd) of water demand. See Table 3 for a summary of calculations.
Table 3. Water Demand Based on Current Zoning

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Net Acres</th>
<th>Units /acre</th>
<th>Consumption Factor</th>
<th>Consumption (gpd)</th>
<th>Consumption (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Family Residential</td>
<td>50.63</td>
<td>22</td>
<td>225 gpd/unit</td>
<td>250,619</td>
<td>281</td>
</tr>
<tr>
<td>Total</td>
<td>50.63</td>
<td></td>
<td></td>
<td>250,619</td>
<td>281</td>
</tr>
</tbody>
</table>

2City of Sacramento Administrative Draft EIR, 2002

3.4. Site Water Demand Under the Proposed Project

Water demand for the proposed development is calculated to be 240,962 gallons per day. See Table 4.

Table 4. Water Demand for Proposed Project

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Gross Acres</th>
<th>Units</th>
<th>Consumption Factor</th>
<th>Consumption (gpd)</th>
<th>Consumption (AFY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>25.9</td>
<td>0</td>
<td>2,680 gpd/acre</td>
<td>69,412</td>
<td>78</td>
</tr>
<tr>
<td>Office</td>
<td>0.94</td>
<td>0</td>
<td>2,680 gpd/acre</td>
<td>2,519</td>
<td>3</td>
</tr>
<tr>
<td>Child Care</td>
<td>1.42</td>
<td>0</td>
<td>2,680 gpd/acre</td>
<td>3,806</td>
<td>4</td>
</tr>
<tr>
<td>Senior Residential</td>
<td>0</td>
<td>252</td>
<td>225 gpd/unit</td>
<td>56,700</td>
<td>63.5</td>
</tr>
<tr>
<td>Multi-Family Residential</td>
<td>0</td>
<td>472</td>
<td>225 gpd/unit</td>
<td>106,200</td>
<td>119.1</td>
</tr>
<tr>
<td>TOD Common Area</td>
<td>0.62</td>
<td>0</td>
<td>3,750 gpd/acre</td>
<td>2,325</td>
<td>3</td>
</tr>
<tr>
<td>Other (major streets, city pond)</td>
<td>7.41</td>
<td>0</td>
<td>0 gpd/acre</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>36.29</td>
<td>724</td>
<td></td>
<td>240,962</td>
<td>270</td>
</tr>
</tbody>
</table>

Source: EDAW, March 2003

Water demand for the project identified in Table 4 represents projected demand at full build-out. Project build-out will occur around 2010. Therefore, water demand at the project site after 2010 will remain constant at approximately 270 AFY.

4. Water Supply

4.1. Documentation of Wholesale Water Supplier(s)

The site is located within the City of Sacramento Water Service area (see Appendix A: Regional Setting Map and Appendix D: City of Sacramento Water Service Area). The sole water supplier for the project will be the City of Sacramento.
4.2. Documentation of Water Supply

The City of Sacramento obtains water from three sources: the American River, the Sacramento River and groundwater wells. According to the UWMP, treated water is currently produced at two water treatment plants: the Fairbairn Water Treatment Plant (WTP) on the American River, and the City of Sacramento WTP on the Sacramento River.

4.2.1. Surface Water Sources

All information in this section is taken from the City’s Urban Water Management Plan 2000 (UWMP) unless otherwise indicated. The City has an annual surface water entitlement of 81,800 acre-feet from the Sacramento River, and 245,000 acre-feet from the American River at build-out of all infrastructure that will enable the use of entitlements in the year 2030. The maximum total combined water supply for both the Sacramento and American River by the year 2030, therefore, is 326,800 acre-feet. Refer to Table 5 for a schedule of authorized surface water supply over the next 20 years. Within this report “Authorized Surface Water Used”, which is the language in the UWMP, will be used interchangeably with supply. Authorized supply increases over time based on a contract between the City of Sacramento and the United Stated Bureau of Reclamation. The increase in water supply does not assume the acquisition of additional water rights (based on UWMP and conversations with Dan Sherry, Utilities Department Supervising Engineer, City of Sacramento). Note that due to the nature of the City of Sacramento’s water rights there is no difference in water supply available in normal years, single dry years, or multiple dry years (based on UWMP and conversations with Mel Johnson of the City of Sacramento, May 27, 2003).

Table 5. Authorized City Surface Water Supply

<table>
<thead>
<tr>
<th>Year</th>
<th>Authorized Surface Water Used (acre-ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>183,500</td>
</tr>
<tr>
<td>2005</td>
<td>205,500</td>
</tr>
<tr>
<td>2010</td>
<td>227,500</td>
</tr>
<tr>
<td>2015</td>
<td>257,500</td>
</tr>
<tr>
<td>2020</td>
<td>278,000</td>
</tr>
</tbody>
</table>

City of Sacramento Urban Water Management Plan 2000 Table 3-1, 2001

The City has utilized river water since 1854 and claims pre-1914 rights to divert 75 cubic feet per second (cfs) from the Sacramento River. Currently, the City holds five water rights permits: one for diversion of Sacramento River water and four for diversion of American River water. The Sacramento River permit, Permit 992, has priority of March 20, 1920. Permits 11358 through 11361, on the American River, have priorities ranging from October 1947 to September 1954.
The Sacramento River permit and two of the American River permits (11358 and 11361) authorize direct diversion. The other two permits (11359 and 11360) authorize re-diversion and consumptive uses of American River tributaries’ water stored and released at the City’s Upper American River Project power development reservoirs. The reservoirs (Union Valley, Ice House, Rubicon, Rockbound, Loon Lake and Gerle) are located in the Crystal Basin area of the Sierra Nevada Mountains east of Sacramento and north of U.S. Highway 50.

In 1957, the Bureau of Reclamation (Bureau) and the City entered into a contract that stipulates that the Bureau, through the release of water from Central Valley Project (CVP) reservoirs, will supplement the City’s water rights to divert from the American River up to a maximum of 245,000 acre-feet per year. In addition, the Bureau will supplement the City’s water rights to divert from the Sacramento River up to a maximum of 81,800 acre-feet per year, regardless of the supply otherwise available to the City under its water rights. This agreement is not dependent on climatic conditions. Therefore the water right is unaffected by single and multiple dry years. The City will limit its total diversions from the Sacramento and American Rivers to 326,800 acre-feet per year.

The City’s permits allow authorized water diversions to be used within specified areas described as authorized places of use (POU). Permit 992 designates lands within the City of Sacramento as the authorized place of use. Permits 11358 and 11360 designate a 79,500-acre area within and adjacent to the City as the authorized POU. Permits 11359 and 11360 designate a 96,000-acre area within and adjacent to the City as the POU. Appendix D: City of Sacramento Water Service Area, illustrates the 96,000-acre authorized POU and current City limits. The College Square project fits within all of these POUs. Due to the voluminous nature of the permits, they are not included within this report. Permits are on file with the City of Sacramento Utilities Engineering Department, and are available for review by contacting Dan Sherry, Water Supervising Engineer ((916) 264-1419, 1395 35th Avenue, Sacramento, CA 95822).

While the UWMP does not provide a detailed single and dry year supply scenario, it does present a contingency plan for water shortages of up to 50 percent. The College Square project will comply with all aspects of the water contingency plan, which is outlined in Table 6.

<table>
<thead>
<tr>
<th>Table 6. Drought Contingency Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1 10 to 20%</strong></td>
</tr>
<tr>
<td><strong>City Action</strong></td>
</tr>
<tr>
<td>Adopt necessary ordinances</td>
</tr>
<tr>
<td>• Initiate public information campaign</td>
</tr>
<tr>
<td>• Ask customers for 10 to 20 percent use reduction</td>
</tr>
<tr>
<td>• Increase efficiency of system operations:</td>
</tr>
<tr>
<td>• Enforce hydrant use regulations</td>
</tr>
<tr>
<td>• Intensify leak detection and repair program</td>
</tr>
<tr>
<td><strong>Requested Consumer Action</strong></td>
</tr>
<tr>
<td>• Landscape Irrigation restrictions:</td>
</tr>
<tr>
<td>• Odd/Even outdoor watering schedule</td>
</tr>
<tr>
<td>• No outdoor irrigation on Mondays</td>
</tr>
<tr>
<td>• 12 noon to 6 pm prohibition during daylight savings period</td>
</tr>
<tr>
<td>Conservation Savings Goal</td>
</tr>
<tr>
<td>--------------------------</td>
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</tbody>
</table>

**Stage 2**

20 to 30%

Adopt addition ordinances to:
- Limit outdoor irrigation to 2 days/week
- Allow car washing with bucket only
- Further limit park, cemetery, etc. irrigation
- Further limit hours for outdoor irrigation
- All public water uses not required for health and safety prohibited
- Main flushing allowed only for emergency purposes.
- Further increased water waste patrols
- Intensified public education campaign

- Landscape Irrigation restrictions:
  - 2 day/week schedule
  - Watering time reduced
  - Cars washed with buckets only
  - No washing down of paved surfaces

<table>
<thead>
<tr>
<th>Stage 3</th>
<th>30 to 40%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adopt additional ordinances to:</td>
</tr>
<tr>
<td></td>
<td>Limit outdoor irrigation to 1 days/week manual application</td>
</tr>
<tr>
<td></td>
<td>Prohibit car washing</td>
</tr>
<tr>
<td></td>
<td>Further limit park, cemetery, etc. irrigation</td>
</tr>
<tr>
<td></td>
<td>Continue vigorous public information campaign</td>
</tr>
<tr>
<td></td>
<td>Intensify leak detection program</td>
</tr>
</tbody>
</table>

- Landscape Irrigation restrictions:
  - 1 day/week manual application
  - No car washing

<table>
<thead>
<tr>
<th>Stage 40 to 50%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Adopt additional ordinances to:</td>
</tr>
<tr>
<td>Prohibit outdoor irrigation of turf areas</td>
</tr>
<tr>
<td>Further limit park, cemetery, etc. irrigation</td>
</tr>
<tr>
<td>Prohibit irrigation of median strips</td>
</tr>
</tbody>
</table>

- Landscape Irrigation restrictions:
  - No residential turf watering
  - No median strip watering
  - Reduced irrigation to parks

City of Sacramento Urban Water Management Plan 2000 Table 8-5, 2001

### 4.2.2. Groundwater Sources

All information in this section is taken from the UWMP unless otherwise noted. Approximately 15 percent (24,000 AF) of the City’s water demand is currently met through groundwater wells. The estimated safe yield of the groundwater basin underlying the American River POU is between 55,000 and 80,000 acre-feet, which is two to three times the City’s recent historical usage. Most wells are located in the northern portion of the City. The proposed project will not affect the City’s planned use of groundwater. There is sufficient excess surface water to meet the demands of the proposed project in excess of the demands anticipated in the UWMP.
5. Supply Reliability Analysis

5.1. City Supply Reliability

Based on figures presented in the City’s UWMP, Sacramento’s water supply is sufficient for the next 20 years. See Table 8 for a summary of City supply and demand until 2020. The City’s supply is not dependent on single dry and multiple dry year scenarios due to the nature of the City’s water rights. Physical limitations associated with the system, however, may limit the City’s ability to exercise their water rights in a drought situation. Table 7 illustrates the scheduled expansions of the Fairbairn and Sacramento Water Treatment Plants. Expansions are currently underway at the Sacramento Plant.

Table 7. Water Treatment Plant Expansion Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sacramento Water Treatment Plant</td>
<td>68,000</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Fairbairn Water Treatment Plant</td>
<td>56,000</td>
<td>56,000</td>
<td>125,000</td>
</tr>
<tr>
<td>Groundwater Wells</td>
<td>24,000</td>
<td>24,000</td>
<td>24,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>148,000</strong></td>
<td><strong>180,000</strong></td>
<td><strong>249,000</strong></td>
</tr>
</tbody>
</table>

Based on Discussion with Dan Sherry, City of Sacramento Utilities Department Supervising Engineer July 14, 2003

During a drought condition, it is possible that flows in the American River could be below Hodge Flows. If flows are below Hodge Flows, the City can only divert 100 MGD (62,000 acre-feet/yr) of water from the American River at the Fairbairn Water Treatment Plant. Single and multiple dry year scenarios assume 62,000 acre-ft of water is available from the Fairbairn Water Treatment plant (Dan Sherry, 2003). It is also assumed that groundwater use will not increase during single and multiple dry years. Table 8 illustrates the City’s ability to meet foreseen water demand based on entitlements and physical infrastructure in normal, single dry, and multiple dry years.

Table 8 illustrates that the City of Sacramento has sufficient water rights and the infrastructure to deliver water in normal, single and multiple dry years. A shortage of water is not foreseen in Sacramento; however, the City has developed a shortage contingency plan that outlines steps taken in case of drought to reduce water demand by as much as 50 percent. The shortage contingency plan is included for reference in Appendix E: City of Sacramento Water Forum Water Conservation Plan. The proposed College Square development will comply with City water use reduction mandates.
5.2. Impact of Proposed Development on Supply Reliability

As illustrated in Table 2, build-out demand for the project site assumed in the UWMP is 190 acre-feet per year. A reasonable estimate of water demand assumed after the zoning was changed to medium density residential, as shown in Table 3, is 281 acre-feet per year. As illustrated in Table 4, the demand for the proposed project would be 270 acre-feet per year. Hence, the proposed development would generate a greater demand for water than planned for the project site in the City’s UWMP, and less than could be reasonably assumed based on current zoning.

The proposed project would result in water demand for the project site that is 80 acre-feet per year greater than that assumed for the site in the UWMP. However, as indicated in Table 8, the City is projected to have a surplus deliverable supply of 73,181 acre-feet per year during normal years and 63,000 during both single dry and multiple dry years. Hence, the City will have adequate water supply to serve the proposed project (even though the proposed project will result in greater water demand for the project site than was assumed in the UWMP).

5.3. Supply Reliability Assessment

The City of Sacramento has adequately provided for the reliable supply of water to POUs that it services. Single and multiple year supply reliability are assured by the nature of the water rights that the City of Sacramento holds. Regardless, a water conservation plan that reduces water demand up to 50 percent in times of drought has been adopted. The proposed College Square development would require more water than was anticipated for the site in the UWMP. However, the City of Sacramento would still have sufficient water rights to supply the proposed development because of its surplus supply.

---

Table 8. City Supply Reliability

<table>
<thead>
<tr>
<th>Year</th>
<th>Deliverable Water Supply Normal Year¹ (acre-ft)</th>
<th>Deliverable Water Supply Single Dry Year (acre-ft)</th>
<th>Deliverable Water Supply Multiple Dry Year (acre-ft)</th>
<th>Projected Water Demand¹ (acre-ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>148,000</td>
<td>148,000</td>
<td>148,000</td>
<td>136,776</td>
</tr>
<tr>
<td>2005</td>
<td>205,500</td>
<td>186,000²</td>
<td>186,000²</td>
<td>150,198</td>
</tr>
<tr>
<td>2010</td>
<td>227,500</td>
<td>186,000²</td>
<td>186,000²</td>
<td>163,123</td>
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<tr>
<td>2015</td>
<td>249,000</td>
<td>186,000²</td>
<td>186,000²</td>
<td>172,824</td>
</tr>
<tr>
<td>2020</td>
<td>249,000</td>
<td>186,000²</td>
<td>186,000²</td>
<td>175,819</td>
</tr>
</tbody>
</table>

¹Based on Table 4-6 UWMP
²Reduction in supply assumes intake at Fairbairn WTP limited by Hodge Flow condition
References

City of Sacramento, Administrative Draft EIR for the College Square Planned Unit Development, May 2002. Prepared by EDAW, Inc. for the City of Sacramento, California.


Johnson, Mel, City of Sacramento Department of Utilities, Engineering, May 27, 2003.

Sherry, Dan, City of Sacramento Utilities Department, pers. com., July 14, 2003.

Water entitlements and contracts, available on file with Dan Sherry, City of Sacramento Utilities Department, Supervising Engineer, (916) 264-1419, 1395 35th Avenue, Sacramento, CA 95822.

- Sacramento River permit, Permit 992 priority of March 20, 1920
- American River Permits 11358 through 11361 priorities ranging from October 1947 to September 1954.
- United Stated Bureau of Reclamation Contract 1957
Appendix A: Regional Setting Map
Appendix B: Local Setting Map
Appendix C: Utilities Map
Appendix D: City of Sacramento Water Service Area
City of Sacramento
Water Service Area
College Square PUD

Legend
- City of Sacramento
- Water Service Area (Corresponds to City of Sacramento Boundary)
Appendix E: City of Sacramento Water Forum Water Conservation Plan
APPENDIX B

CITY OF SACRAMENTO
WATER FORUM WATER CONSERVATION PLAN

BMP 1  INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE
PROGRAMS FOR SINGLE FAMILY AND MULTI-FAMILY RESIDENTIAL,
AND INSTITUTIONAL CUSTOMERS

A. Within three years of agreement signing, the City of Sacramento will have:
   1. trained water auditors on staff or available through cooperative agreements with other
      purveyors;
   2. prepared and made available, as needed, multi-lingual water audit materials for
      customers;
   3. prepared and made available to customers seasonal climate-appropriate irrigation
      information; and
   4. investigated opportunities for community based organizations (CBOs) to receive the
      training and financial incentives necessary for them to implement this BMP for their
      constituents.

B. The City of Sacramento will annually:
   1. audit all SF and MF accounts which receive a meter, offer audits to all Institutional
      accounts which receive a meter and promote audits to unmetered SF and MF
      customers;
   2. offer, through bill inserts or other means, water-use reviews to all customers; and
   3. survey past program participants to determine if audit recommendations were
      implemented.

C. The water-use review program will:
   1. provide audits conducted by trained auditors;
   2. provide audits that may include device installation by the City of Sacramento or
      customer (showerheads, faucet aerators, etc.), identification of water-use problems,
      recommend repairs, instruction in landscape principles (hydrozones, ET, etc.),
      irrigation timer use and, when appropriate, meter reading;
   3. provide program participants with seasonal irrigation schedules by hydrozone and/or
      station; and
   4. provide incentives to achieve 12% annual participation of the targeted 20% of
      customers.

D. The City of Sacramento will be fully implementing the program described above no later than
the beginning of the fourth year after agreement signing.
BMP 2  PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS

A. Within three years of agreement signing, the City of Sacramento will:
   1. provide plumbing retrofit kits to at least 2 percent of residential accounts and, where appropriate, install high quality low-flow showerheads and faucet aerators. The program has an installed retrofit device target of 20 percent of residential customers in ten years;
   2. offer toilet leak test kits to all change of account customers who visit the signatory’s office;
   3. work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents;
   4. work with local hardware/home stores to offer free water conservation information at the check-out; and
   5. investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.

B. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 3  DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR

A. Within three years of agreement signing, the City of Sacramento will complete and maintain, in the unmetered areas:
   1. an annually updated 'system map' of type, size and age of pipes; pressures; and leak history;
   2. installation of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses;
   3. an ongoing meter calibration and replacement program for all production and distribution meters;
   4. an ongoing leak detection & repair program (as defined in the manual) focused on high probability leak areas identified by the system map; and
   5. a complete system-wide leak detection program, repeated no less often than every ten years; unless there are special circumstances, such as age of system or planned main replacement.

B. Within three years of agreement signing, the City of Sacramento will complete / maintain, in metered areas:
   1. an annual system water audit, determining the difference between production and sales;
   2. an annually updated ‘system map’ of: type, size and age of pipes; pressures; record of leaks; etc.; with historic data;
   3. an ongoing meter calibration and replacement program;
   4. an ongoing leak detection/repair program focused on high probability leak areas identified by map; and
5. a complete system wide leak detection program, repeated: when the system water audit determines losses to be greater than 10%; when the losses are less than 10% if the program is determined to be cost effective.

C. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

**BMP 4 NON-RESIDENTIAL METER RETROFIT**

A. Within three years of agreement signing, the City of Sacramento will:
   1. identify all non-residential unmetered customers (does not include MF customers);
   2. provisionally identify any non-residential unmetered customers which may be very difficult and expensive to retrofit;
   3. meter 100 percent of unmetered non-residential within five years; and
   4. consider installing separate landscape meters at non-residential unmetered customer locations.

B. Within 60 days of meter installation, the City of Sacramento will provide newly metered non-residential customers with:
   1. information on how to read their meter and a consumption-based water bill; and
   2. information on the City of Sacramento-provided water conservation programs and services.

C. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

**BMP 4 RESIDENTIAL METER RETROFIT**

Going as far as possible within the limits of its City Charter, the City of Sacramento would implement a voluntary meter retrofit program.

The goals of the program are to:

A. Complete 400-555 residential retrofits annually;

B. Build public understanding and acceptance of alternative water saving programs through education and broad-based community outreach; and

C. Provide opportunity for each retrofitted service to voluntarily convert to a metered billing via a comparison billing process.

The program elements and participation procedures for the voluntary residential meter retrofit program are as follows:

A. City allocates $250,000-$400,000 for residential meter retrofit program fiscal year xx-xx;
B. Program is offered to all eligible single-family residential customers and accepted on a first come-first serve basis;

C. City crews install meter at no cost to customer;

D. Meter reading occurs monthly by city staff utilizing either two methods: AMR (Automated Meter Reading) or electronic meter books;

E. Water use consumption data is displayed on customers utility bill for each monthly read, represented in gallons per day; and

F. After two years, customers will be provided a summary of water use data including a comparison of residential flat rates and residential metered rates. At that time the customer will be asked to choose:

Option A – which is to remain on the residential flat rate structure; or
Option B – which is to change to a residential metered rate structure and bill according to actual water used. Once converted to residential meter rate structure, service to the property is bound to metered rate.

Regardless, customers will continue to receive water use consumption data on a monthly basis and if Option A is chosen customer will have the right to choose Option B at anytime.

The City will market its voluntary residential meter retrofit program in the following manner:

A. PRINTED MATERIAL SUCH AS:
   Program Brochures; Q&A Fact Sheet
   Application Forms; and
   Efficient Irrigation Materials.

B. PAID ADVERTISEMENTS IN
   THE FOLLOWING PUBLICATIONS
   SUCH AS:
   Sacramento Bee Neighbors Sections; The Old City Guardian; Land Park News; East Sac News; Inside East Sac; Natomas Journal; and the Pocket News.

C. USE OF CITY RESOURCES TO
   PROVIDE PROGRAM
   INFORMATION IN:
   Utility Bill inserts; Billboard on Capitol City
D. DISPLAYS AT COMMUNITY EVENTS SUCH AS:

City services nights and the Thursday night market.

E. DEVELOP TARGETED MAILING TO:

Neighborhood Association Newsletters; Utility Department database; and City neighborhood associations who received Water Forum presentations.

F. DEVELOP HOMEOWNERS PACKETS FOR:

Newcomers to Sacramento and Chamber of Commerce Offices.

Potential incentives that might be offered by the City to encourage residents to participate in the voluntary residential meter retrofit program include:

A. indoor / outdoor audits for single family and multi-family residences;

B. Rebates for:
   1. ULF toilets
   2. Indoor fixture replacement
   3. Indoor appliance replacements
   4. Landscape plant material
   5. Landscape irrigation equipment

C. financial savings such as a reduction in sewer fees based upon metered water use.

**BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS**

A. Within three years of agreement signing, the City of Sacramento will:
   1. identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database;
   2. have certified and/or trained landscape water auditors on staff or available through agreements;
   3. prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers/landscape workers;
4. develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR Landscape Water Management Handbook, and provide that information to the customers with one acre or larger landscapes; and

5. begin installation of climate appropriate water efficient landscaping at landscaped the City of Sacramento facilities, phased in over the five years following agreement signing.

B. The City of Sacramento will annually:
   1. directly contact metered irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water audits;
   2. provide landscape audits to all CII and Irrigation accounts at time of metering;
   3. survey past program participants to determine if audit recommendations were implemented; and
   4. offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.

C. The City of Sacramento’s landscape water-use review program will:
   1. provide audits conducted by certified landscape water auditors;
   2. provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area;
   3. provide program participants with seasonal irrigation schedules by hydrozone and/or station;
   4. provide program participants with regular reminders to adjust irrigation timer settings; and
   5. provide audits to 12 percent of metered greater than 1acre CII and Irrigation accounts annually. Audit 33 schools each year and provide financial assistance to repair their irrigation systems. Spend $30,000 on irrigation system improvements at each of five City parks annually for 20 years.

D. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS

A. The City of Sacramento will enact and implement a landscape water efficiency ordinance pursuant to the “Water Conservation in Landscaping Act” (California Code of Regulations, Chapter 2.7), that is at least as effective as the Model Water Efficient Landscape Ordinance described in Chapter 2.7, Sections 490 - 495.

B. The City of Sacramento will:
1. participate in and support a regional landscape task force established by the Water Forum Successor effort. The Taskforce will include other local governments and water purveyors, the building and green industries and environmental / public interest groups. It will review the existing local ordinances to determine if they are at least as effective as the Model Water Efficient Landscape Ordinance. The Taskforce may suggest revisions to the existing landscape ordinances;

2. as part of the Taskforce, participate in a review of the implementation of the local ordinances, including builder compliance, landscape plan review, final inspection/certification process and actual water use to determine their effectiveness; and

3. as part of the Taskforce, determine if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

C. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 7 PUBLIC INFORMATION

A. Within three years of agreement signing, the City of Sacramento program will include:

1. A combination of a City of Sacramento specific program in conjunction with limited participation by the City of Sacramento in the Sacramento Area Water Works Association (SAWWA) Conservation Committee’s Public Outreach Program or other equivalent regional program. At this time limited participation in this program is based upon an annual contribution by the City of Sacramento to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach.

2. The City of Sacramento agrees to spend the difference between the annual per connection SAWWA contribution and their flat annual contribution to SAWWA on an enhanced within-service-area implementation of elements a-f listed below:
   a) using utility bill inserts or messages on payment notices;
   b) providing information on residential metered customers’ bills showing use in gallons per day for the last billing period compared to the same period the year before;
   c) providing public speakers to community groups and the media;
   d) using paid and public service advertising for a water conservation campaign;
   e) providing public information to promote other water efficient practices; and
f) coordinating with other governmental agencies, industry groups and public interest groups.

**BMP 8 SCHOOL EDUCATION**

A. Within three years of agreement signing, the City of Sacramento program will include:

1. A combination of a City of Sacramento specific program in conjunction with limited participation by the City of Sacramento in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. At this time limited participation in this program is based upon an annual contribution by the City of Sacramento to the SAWWA Conservation Committee for the combined Public Information and School Education program. This program includes programs such as: school outreach, promotional materials, community events/fairs, and a Web site.

2. The City of Sacramento agrees to spend the difference between the annual per connection SAWWA contribution and their flat annual contribution to SAWWA on an enhanced within-service-area implementation of elements a-d listed below:
   a) offering tours of the City of Sacramento facilities to elementary schools in the City;
   b) working with schools served by the City of Sacramento to promote school audits, reduced water bills, and innovative funding for equipment upgrades;
   c) working with the school districts in the City's service area to provide educational materials promoting efficient water use to one or more grade levels on an annual basis; and
   d) working with school districts in the City's service area to offer instructional materials and assistance to all teachers of the targeted grade level in order to promote efficient water use.

**BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION**

A. Within three years of agreement signing, the City of Sacramento will have:

1. trained commercial/industrial water auditors on staff or available through cooperative agreements;
2. the DWR Commercial / Industrial (CI) water-use materials available for CI customers;
3. established, if possible, cooperative CI audit programs with other utilities; and
4. a list of available CI water-use consultants.

B. The City of Sacramento or their representative will annually:

1. provide audits to all newly metered CI accounts;
2. offer, through bill inserts or other means, CI water-use reviews to all CI customers; and

City of Sacramento Urban Water Management Plan
Appendix B - Water Forum Water Conservation Plan
3. survey past program participants to determine if audit recommendations were implemented.

C. The City of Sacramento’s water-use review program will:
   1. provide audits conducted by trained commercial/industrial water auditors;
   2. provide incentives to achieve at least 20% annual participation of the targeted 10% of customers; and
   3. contact past program participants for a follow-up audit at least every fifth year.

D. The City of Sacramento will establish policies requiring water intensive commercial and industrial building permit applicants (new, modified or change-of-water-use) to conduct a water-use efficiency review and submit the findings in any required environmental documentation for the commercial or industrial project.

E. Within three years of agreement signing, the City of Sacramento will:
   1. promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers;
   2. consider separate landscape water meter(s) when the combined service require a 1-1/2” meter; and
   3. require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

F. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS

A. Within three years of agreement signing, the City of Sacramento will:
   1. identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale);
   2. establish quantity-based rates for each account type, except SF and MF accounts;
   3. begin educating all customers about the quantity-based rate structure; and
   4. provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in gallons, and what charges would have been if based on actual use.

B. The City of Sacramento will, within ten years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES

A. The City of Sacramento will implement a program which includes:

City of Sacramento Urban Water Management Plan
Appendix B - Water Forum Water Conservation Plan
1. information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing SF accounts in the City's service area on an annual basis;
2. audit all SF/MF accounts which receive a meter and promote audits to unmetered SF/MF customers; and
3. annual pre-irrigation season notification to Single Family Homes served by the City of City provided landscape assistance (audits/surveys, materials, special offers, etc.).

B. The City of Sacramento's on-going program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
   1. participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within the City of Sacramento's service area but should be convenient to the City of Sacramento's customers);
   2. annual participation at local and regional landscape fairs and garden shows;
   3. annual cooperative education and marketing campaigns with local nurseries;
   4. annual irrigation season landscape media campaign; and
   5. annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. The City of Sacramento will:
   1. participate in and support a regional landscape task force established by the Water Forum Successor Effort. The Taskforce will include other local governments and water purveyors, the building and green industries and environmental/public interest groups. It will review the existing local ordinances to determine if they are at least as effective as the Model Water Efficient Landscape Ordinance: The Taskforce may suggest revisions to the existing landscape ordinances;
   2. as part of the Taskforce, participate in a review of the implementation of local ordinances, including builder compliance, landscape plan review, final inspection/certification process and actual water use to determine their effectiveness; and
   3. as part of the Taskforce, determine if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise, and, if so, recommend and support corrective action.

E. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

**BMP 13 WATER WASTE PROHIBITION**

Within three years of agreement signing, the City of Sacramento will enact a water waste prohibition ordinance which includes measures and enforcement mechanisms.
A. The water waste prohibition measures will include:
   1. irrigation water shall not be allowed to run off to adjoining property or to a roadside
ditch or gutter;
   2. leaking pipes, fixtures, or sprinklers shall be repaired promptly;
   3. open hoses not permitted - automatic shut-off nozzles are required; and
   4. swimming pools, ponds and fountains shall be equipped with recirculating pumps.
      Pool draining and refilling only for health, maintenance or structural reasons
      requires agency approval.

B. Other measures, such as the following, may be permanent, seasonal or related to water
   shortage:
   1. restricting irrigation hours or days;
   2. use of a hose to clean sidewalks, driveways, patios, streets and commercial parking
      lots is not permitted, except for health and safety;
   3. restaurants serving water only on request;
   4. restricting the use of potable water for compaction, dust control or other construction
      purposes when non-potable water is available; and
   5. limiting the flushing of sewers or fire hydrants, except for health and safety (may be
      permanent, seasonal or related to water shortage).

C. The waste prohibitions will include as enforcement mechanisms a graduated series of
   responses to water wasting customers. Enforcement typically includes: personal notification
   and an offer of a water-use review / repair service, monetary fees, service termination and, in
   some unmetered service areas, and mandatory water meter installation / reading.

D. Within three years of agreement signing the City of Sacramento will:
   1. notify all customers at least annually of the waste prohibitions (by newspaper, public
      notice, mailings, utility billings or a combination of such) prior to the irrigation
      season;
   2. have staff will respond to reports of water waste in a timely manner;
   3. will have water waste patrols at least during water shortages; and
   4. will cooperate with the city or county in their program enforcement efforts.

BMP 14 WATER CONSERVATION COORDINATOR

The City of Sacramento’s water conservation coordinator is Angela Anderson and she is
responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one staff member at the City of Sacramento will
be an AWWA Certified Water Conservation Practitioner (Level II) or pass equivalent training.

BMP 16. ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-
RESIDENTIAL CUSTOMERS

City of Sacramento Urban Water Management Plan
Appendix B - Water Forum Water Conservation Plan
A. Within three years of agreement signing, the City of Sacramento will:
   1. identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use; and
   2. if possible, established a cooperative district / sanitation district ULF rebate program.

B. The City of Sacramento will annually:
   1. provide $75 ULF rebates vouchers to newly metered non-residential accounts for each 3.5+ gpf toilet; and
   2. $75 ULF rebates voucher will be provided to each SF home and MF unit which is audited.

C. The retrofit program will:
   1. offer the necessary incentive to insure that at least 10 percent of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90 percent of all non-residential toilets being ULFs within ten years;
   2. consider larger rebates for the more expensive high-use flushometer-type ULF installations;
   3. investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents; and
   4. consider monitoring the change in water use at metered-accounts which install ULF toilets.

D. The City of Sacramento will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

CITIZEN INVOLVEMENT PROGRAM

Broad-based citizen involvement is essential to the implementation of a long-term water conservation program. Although water savings from educational, service-oriented, and outreach programs cannot be quantified, experience has shown that they build public understanding and acceptance throughout the planning process.

The City of Sacramento Department of Utilities is committed to fostering this relationship to encourage early public participation and provide a vital link for local government and neighborhoods to communicate. Establishment of a Citizen Advisory Committee will provide input on both a local and city-wide level with respect to community views and recommendations related to water management issues, to include, but not limited to: conservation, meters, programs, rate structures, water supply, operation and maintenance costs and treatment procedures.

The formation of this Citizen Advisory Committee, organized and managed by the Department of Utilities, will be convened to serve in an advisory capacity. Possible members of the committee will be recruited from:
   - Neighborhood Association Advisory Group (NAAG)

City of Sacramento Urban Water Management Plan
Appendix B - Water Forum Water Conservation Plan
- Sacramento County Alliance of Neighborhoods (SCAN)
- City of Sacramento Parks and Recreation Committee
- California Landscape Contractors Association (CLCA)
- Environmental Council of Sacramento
- Water Education Foundation
- Business Industry Association

Also, the Sacramento City Council will receive annual progress reports summarizing the Department of Utilities' efforts to encourage water wise management programs that are efficient, cost-effective and affordable for our community.