RESOLUTION NO. 2010-009

Adopted by the Sacramento City Council

January 7, 2010

ACCEPTING THE FEASIBILITY STUDY REPORT AND ADOPTING THE MITIGATED NEGATIVE DECLARATION AND THE MITIGATION MONITORING & REPORTING PROGRAM FOR THE CITY COLLEGE LIGHT RAIL STATION PEDESTRIAN/BICYCLE CROSSING PROJECT (T15065700)

BACKGROUND

A. The project proposes to construct a new bicycle/pedestrian crossing that will extend from the Light Rail Transit (LRT) Station at Sacramento City College to the existing and proposed new neighborhoods east of the Union Pacific Railroad (UPRR) tracks.

B. The Feasibility Study Report provides estimated costs, benefits, and concerns of alternative methods of providing safe pedestrian and bicycle access across the multiple UPRR and LRT tracks. The study also provides environmental documentation, public outreach to inform and gain consensus, and preliminary design for the proposed alternative including construction cost estimate.

C. The Draft Initial Study/Mitigated Negative Declaration (IS/MND) was released on August 10, 2009 for a 30-day review period. One written comment letter was received. The comments from the Department of Toxic Substances Control (DTSC) on testing and remediation of any potential hazardous materials within the project site were consistent with the proposed mitigation in the IS/MND. For these reasons, it was determined that there was no need to revise the IS/MND.

D. The Mitigated Negative Declaration (MND) reflects the lead agency independent judgment and analysis that there is no substantial evidence that the project will have a significant effect on the environment.

BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:

Section 1. The Feasibility Study Report for the City College Light Rail Station Pedestrian/Bicycle Crossing Project (T15065700) is accepted.

Section 2. The Mitigated Negative Declaration (MND) and the Mitigation Monitoring & Reporting Program for the City College Light Rail Station Pedestrian/Bicycle Crossing Project (T15065700) are adopted.

Section 3. Based on its review of the MND and on the basis of the whole record, the City Council finds that the MND reflects the City Council's independent judgment and analysis and that there is no substantial evidence that the Project will have a significant effect on the environment.

Section 4. Upon approval of the Project, the City's Environmental Planning Services shall file or cause to be filed a Notice of Determination with the Sacramento County Clerk and, if the project requires a discretionary approval from any state agency, with the State Office of Planning and Research, pursuant to section 21152(a) of the Public Resources Code and section 15075 of the State EIR Guidelines adopted pursuant thereto.

Section 5. Exhibits A through E are incorporated into and made part of this resolution.

Table of Contents:

Exhibit A: Map of City College Light Rail Station Pedestrian/Bicycle Crossing Project
Exhibit B: Feasibility Study Report
Exhibit C: Comment Letter
Exhibit D: Mitigated Negative Declaration
Exhibit E: Mitigation Monitoring & Reporting Program

Adopted by the City of Sacramento City Council on January 7, 2009 by the following vote:

Ayes: Councilmembers Cohn, Fong, Hammond, McCarty, Pannell, Sheedy, Tretheway, Waters.

Noes: None.

Abstain: None.

Absent: Mayor Johnson.

Lauren Hammond
Vice Mayor Lauren Hammond

Attest:

Shirley Concolino
Shirley Concolino, City Clerk

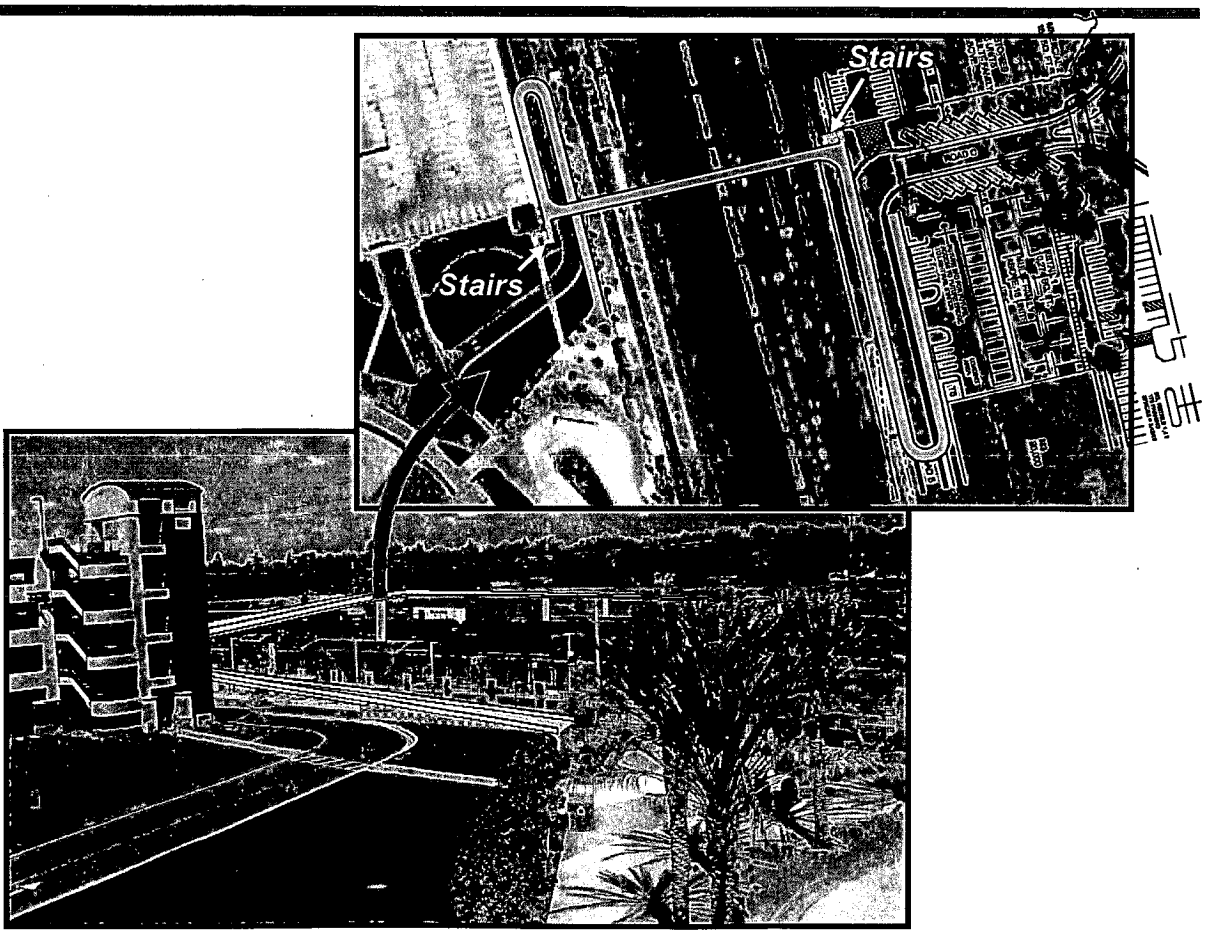
Feasibility Study Report

Prepared for

City of Sacramento
Department of Transportation
November, 2009

By

Lim and Nascimento Engineering, Corp.
In Association with
PMC
Blackburn Geotechnical
REY Engineers
Lucy, Co.



City College Light Rail Station Pedestrian/Bicycle Crossing Project

Feasibility Study Report

City of Sacramento
Department of Transportation

Signature page

November, 2009

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Executive Summary

Project Title - City College Light Rail Station Pedestrian/Bicycle Crossing Project

Project Description - The City of Sacramento (City), in cooperation with the Sacramento Regional Transit, Los Rios Community College District, and Petrovich Development Company, proposes to construct a new pedestrian/bicycle crossing that will extend from the Light Rail Transit (LRT) Station at Sacramento City College to the existing and proposed new neighborhoods east of the Union Pacific railroad (UPRR) tracks. The new crossing will provide a safe and convenient traverse between the LRT Station and the proposed Curtis Park Village residential/commercial development project and existing Curtis Park neighborhood. See Location Map and Vicinity map (Figure 1)

Purpose of Crossing - The fundamental design goals of this project are to:

- Provide safe and pleasant access for pedestrians, bicycles, joggers, wheelchairs, parents pushing strollers, in-line skaters, and other non-motorized travelers across the UPRR right of way;
- Provide convenient access to Light Rail;
- Provide neighborhood connectivity;
- Provide safe and convenient access for the disabled community

The importance of providing this safe route is underscored by the number of tracks within the right-of-way: two UPRR main lines, maintenance yard with seven UPRR spur tracks, two LRT lines and potential for a future UPRR third main line track. Long desired by the local community, this project is now being moved forward by the City of Sacramento.

Purpose of This Study - This Feasibility Study Report provides estimated costs, benefits and concerns of alternative methods of providing safe pedestrian and bicycle access across the multiple UPRR and LRT tracks, provides environmental documentation, public outreach to inform and gain consensus, and preliminary design for the proposed alternative including construction cost estimate.
The preliminary engineering performed as part of this study provides the necessary documentation to support the proposed sighting (location of crossing along the tracks) and geometry of the proposed alternative and planning level evaluation of each alternative considered and conclusions reached.

The Key components of the preliminary engineering include:

- **Initial environmental studies.**

  The extent and accomplishments of the environmental effort exceed the level usually required at this stage of a project. Not only were the technical studies performed and the environmental document been completed, but the following key milestones have been, or are in the process of being, met:

  - Technical studies required for the National Environmental Policy Act (NEPA) submitted to Caltrans for review. Reviews have been completed.
  - The draft CEQA document (an Initial Study Mitigated Negative Declaration, or IS/MND) circulated for thirty day public review. Review period was completed on September 10, 2009.
  - Caltrans, as delegated by FHWA, will issue a Categorical Exclusion pursuant to NEPA for the proposed project. It is anticipated that Caltrans will issue the Categorical Exclusion in February or March 2010.

- **Public Outreach.**

  All major stakeholders (property owners directly affected by the project), and community groups have been involved with the study process.
  Three primary groups of stakeholders have been identified for this project:

  1. Land Owners
     - ✓ Sacramento Regional Transit Authority (LRT)
     - ✓ Union Pacific Railroad (UPRR)
     - ✓ Los Rios Community College District - Sacramento City College campus
     - ✓ Petrovich Development - developers of Curtis Park Village
     - ✓ City of Sacramento – in regards to Sutterville Rd. Overcrossing Widening alternative only

2. Local Community
   - ✓ Sierra Curtis Neighborhood Association (SCNA)
   - ✓ College Plaza Neighborhood Association
   - ✓ Land Park Neighborhood Association (LPNA)
   - ✓ Sacramento Area Bicycle Advocates (SABA)
   - ✓ Sacramento City/County Bicycle Advisory Committee (SacBAC)
   - ✓ WALKSacramento

3. Utilities
   - ✓ See the "Utilities" section of the report for a complete summary and discussion of the utilities.

The success of the public outreach effort is reflected in the following:

- ➢ Consensus for the proposed crossing alternative, location and alignment was reached with the four major stakeholders.
- ➢ Surrounding neighborhoods were informed of the project with mailers, newsletters and an interactive website. Meetings were held with several neighborhood and activist groups.

- **Preliminary Design.**

  A 30% level design of the proposed alternative crossing was performed. Its major components include:

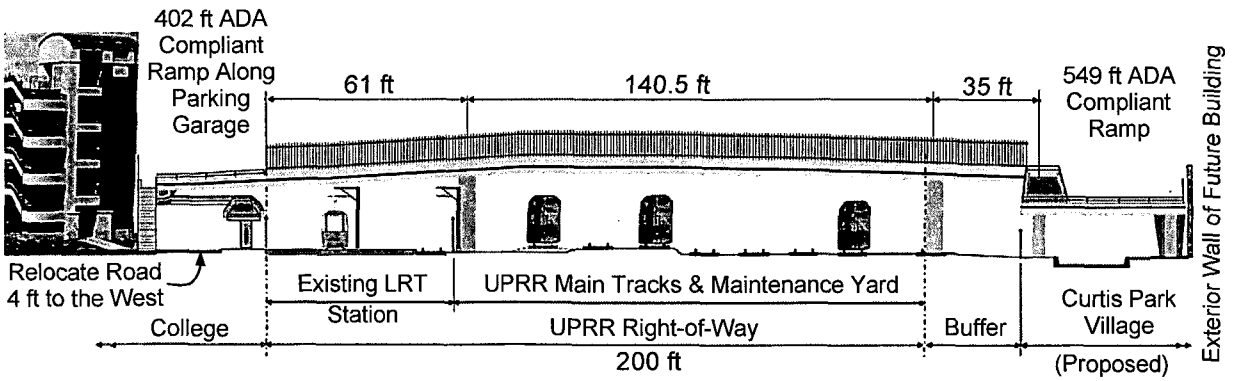
  - ➢ Advanced planning level detail plan sheets including bridge layout and profile, and structure type.
  - ➢ Preliminary calculations to verify the geometry and section dimensions developed.
  - ➢ Preliminary estimate of probable project construction cost.
  - ➢ Impact on adjacent utilities

Types of crossings considered – The following crossing types were considered to be reasonable options and have been evaluated by the study:

- Bridges with ramp approaches, including:
  - o Conventional reinforced concrete and prestressed concrete bridges
  - o "Signature" type steel pipe through arch bridge (deck suspended from arch)
- Bridges with elevators and stairway approaches.
- Widening of the existing Sutterville Road bridge at the southern edge of the study area
- Below ground crossings including, tunnels and carrying the railroad tracks on bridges over a trenched bike path.
- At grade crossing

Proposed Alternative, First -

Of these crossing alternatives evaluated, the proposed alternative is the conventional cast-in-place prestressed concrete bridge with reinforced concrete ramp approaches.



Alternative 1: CIP / Prestressed Bridge Alternative with Ramps

Alternative 1	Design Engineering	Construction Management	* Probable Construction Cost
Probable Cost	$463,000	$ 370,000	$4,375,000
Estimated Schedule	12 months	Concurrent with construction	18 months

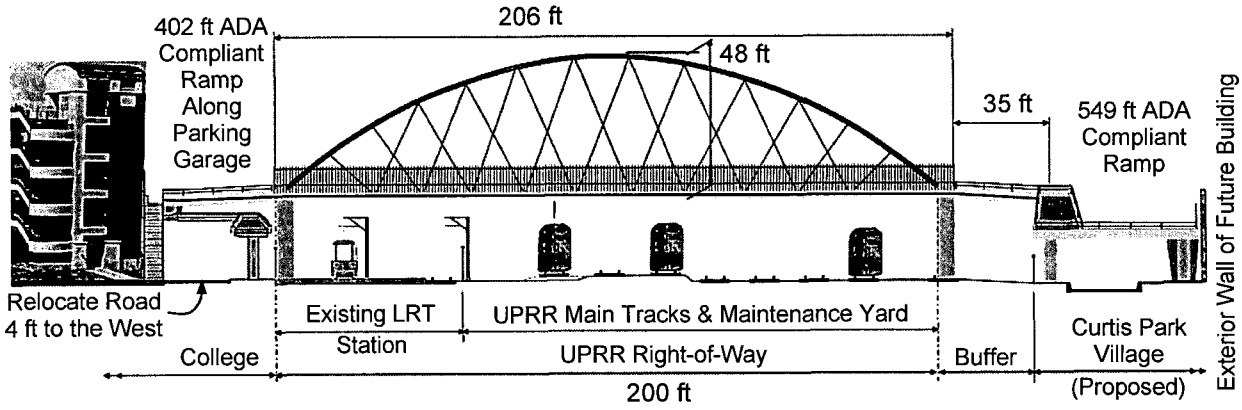
* Includes Easements and Right of Entry Acquisitions, utility relocations, and secure bicycle parking

Proposed Alternative, Second -

A second proposed alternative was selected as a result of public input. The alternative would be considered a "signature" bridge and subject to the availability of the greater funds required for design and construction. It is the through pipe arch bridge with conventional reinforced concrete ramp approaches.

The great advantages of which are:

- Greatly enhanced aesthetics
- Reduced impact to railroad clearance zones, hence, easier railroad approval



Alternative 2: Tied-Arch Alternative, Looking North

Alternative 2	Design Engineering	Construction Management	* Probable Construction Cost
Probable Cost	$695,000	$ 555,000	$6,205,000
Estimated Schedule	16 months	Concurrent with construction	18 months

* Includes Easements and Right of Entry Acquisitions, utility relocations, and secure bicycle parking

Introduction

Project Title

City College Light Rail Station Pedestrian/Bicycle Crossing Project

Project Description - Summary

The City of Sacramento (City), in cooperation with the Sacramento Regional Transit, Los Rios Community College District, and Petrovich Development Company, proposes to construct a new pedestrian/bicycle crossing that would extend from the Light Rail Transit (LRT) Station at Sacramento City College to the existing and proposed new neighborhoods east of the Union Pacific railroad (UPRR) tracks. The new crossing would provide a safe and convenient traverse between the LRT Station and the proposed Curtis Park Village residential/commercial development project and existing Curtis Park neighborhood. See Location Map and Vicinity map (Figure 1 at the end of this section).

Purpose of Crossing

- The fundamental design goals of this project are to:

- Provide safe and pleasant access for pedestrians, bicycles, joggers, wheelchairs, parents pushing strollers, in-line skaters, and other non-motorized travelers across the UPRR right of way;
- Provide convenient access to Light Rail;
- Provide neighborhood connectivity;
- Provide safe and convenient access for the disabled community

The importance of providing this safe route is underscored by the number of tracks within the right-of-way: two UPRR main lines, maintenance yard with seven UPRR spur tracks, two LRT lines and potential for a future UPRR third main line track. Long desired by the local community, this project is now being moved forward by the City of Sacramento.

Construction of a new crossing will also address the issues involved with pedestrians trespassing on UPRR right-of-way to cross the wide and busy rail corridor. LRT officials have noted that improving the safety of this area is critical due to the numerous pedestrians that cross the tracks on a daily basis.

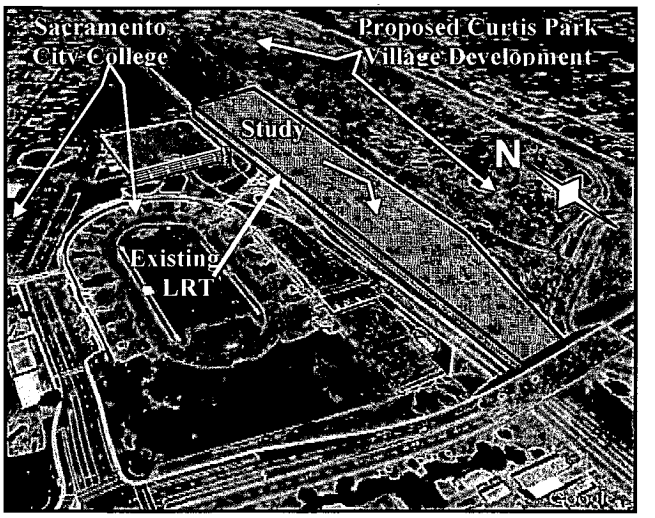
Secondary goals include creating a facility which will actively attract use. In addition to meeting high structural safety standards, the elements of a successful solution to this design challenge include:

- sensitive accommodation of the unique needs of numerous user groups,
- attention to proportions, shapes, surfaces, colors, and other aesthetic features,
- adequate lighting and visual openness,
- attention to other details which encourage or facilitate safety, and
- a landmark character

Project Limits

Based on the City's defined purpose of this crossing, limits of the study area were developed. The limits of the three dimensional study area are designated as the Study Prism in the above photo. This three dimensional prism has the following boundaries:

- The existing Sutterville Road Overhead structure to the south.
- The new Sacramento City College parking garage to the north.



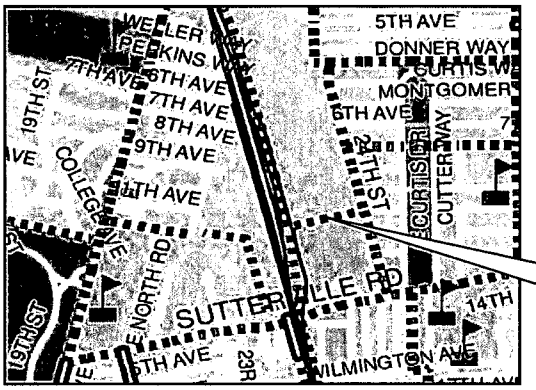
Project Site, Looking North-East
Feasibility Study Prism

- The proposed future Curtis Park Village development to the east.
- City College to the west.

The height of the prism is dictated by bridge type options and by required vertical clearances over the LRT and UPRR tracks as well as by consideration for overhead utilities. The prism also extends below ground for the undercrossing options such as tunnel and rail bridge(s) over a depressed pedestrian/bicycle path.

Existing Conditions

The existing route for pedestrian and cyclists to cross these tracks, the Sutterville Road Overcrossing, does not meet accessibility standards as required by the Americans with Disabilities Act (ADA) and is widely viewed as being unpleasant to use, and has limited functionality - it cannot accommodate wheelchairs. Future development within the eastern portion of the rail yard, the proposed Curtis Park Village project, will increase the need for a new pedestrian and bicycle crossing of the rail yard. Moreover, developing better options for walking and bicycling in new developments is one of the expressed goals of the City's General Plan.



This project will provide an important link in the City of Sacramento's Bike Master Plan by connecting Sacramento City College, the LRT station and neighborhoods to the west with existing and proposed future neighborhoods to the east as shown in the adjacent figure.

Location of proposed crossing coincides with City/County Bikeway Master Plan

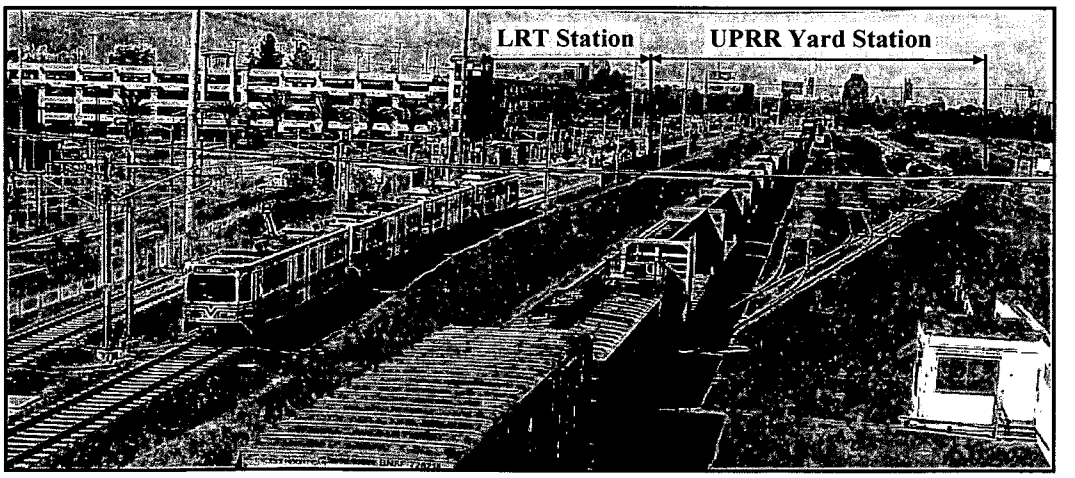
2010 Sacramento City/County Bikeway Master Plan Existing and Proposed Bikeway Map

Proposed Improvements

The proposed project evaluated by this Feasibility Study is an alternative modes route that will provide safe crossing of the LRT and UPRR tracks. Alternatives evaluated for this study include both above ground (bridge including an option to widen the existing Sutterville Road Overhead) and below ground (tunnel or rail undercrossing) structures.

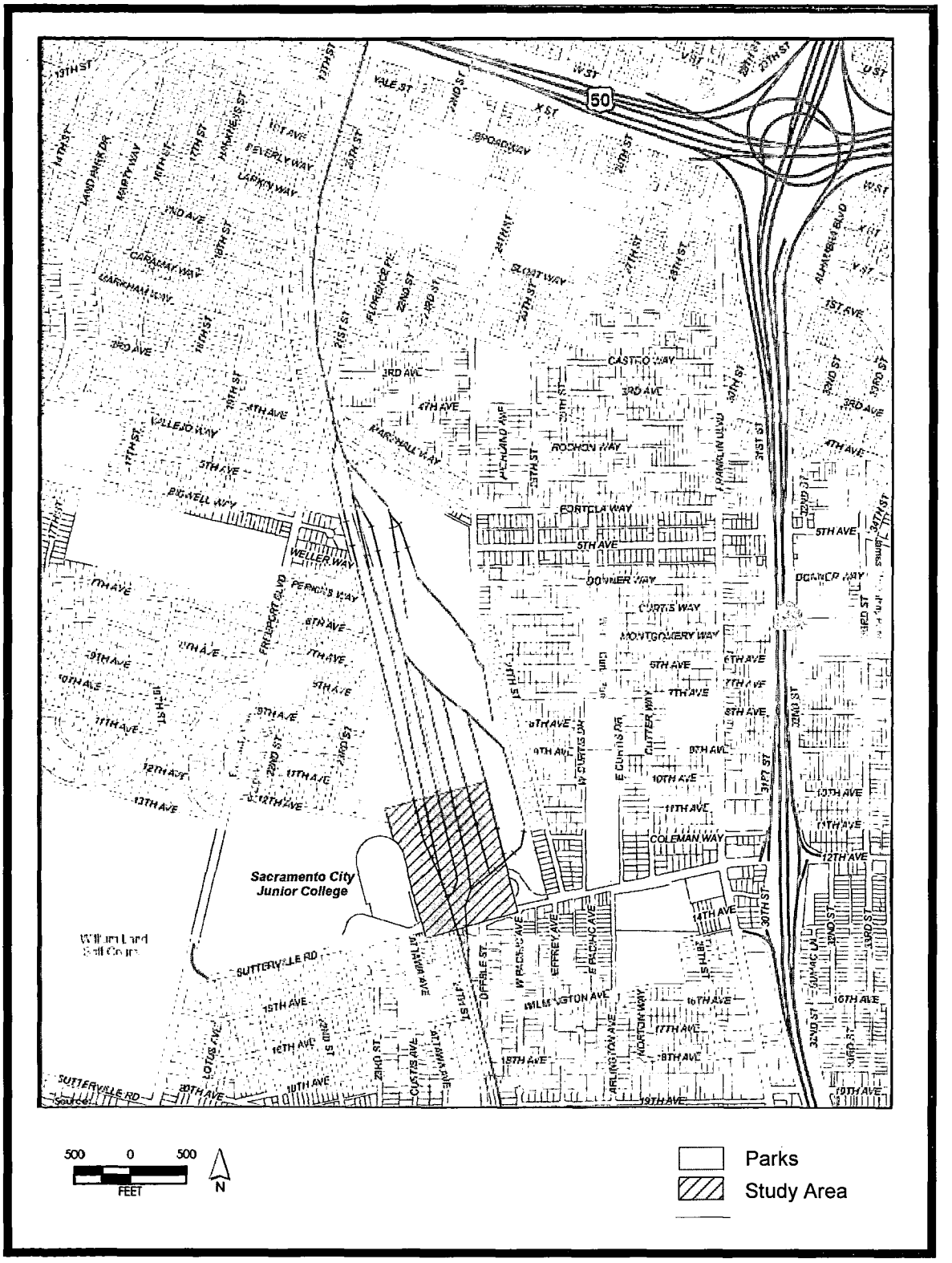
An at-grade crossing (south of the UPRR spur lines and maintenance yard) is also discussed.

The City is also proposing to include secured bicycle parking for this project to promote greater use of this crossing to access the LRT station and for greater use of LRT in general.



Project Site, Looking North From Sutterville Road Overhead Highlighting Width of LRT Station and UPRR Yard to be Crossed

Figure 1 – Location Map



Purpose of This Study

This Feasibility Study Report provides estimated costs, benefits and concerns of alternative methods of providing safe pedestrian and bicycle access across the multiple UPRR and LRT tracks.

The preliminary engineering performed as part of this study provides the necessary documentation to support the proposed sighting (location of crossing along the tracks) and geometry of the proposed alternative and planning level evaluation of each alternative considered and conclusions reached.

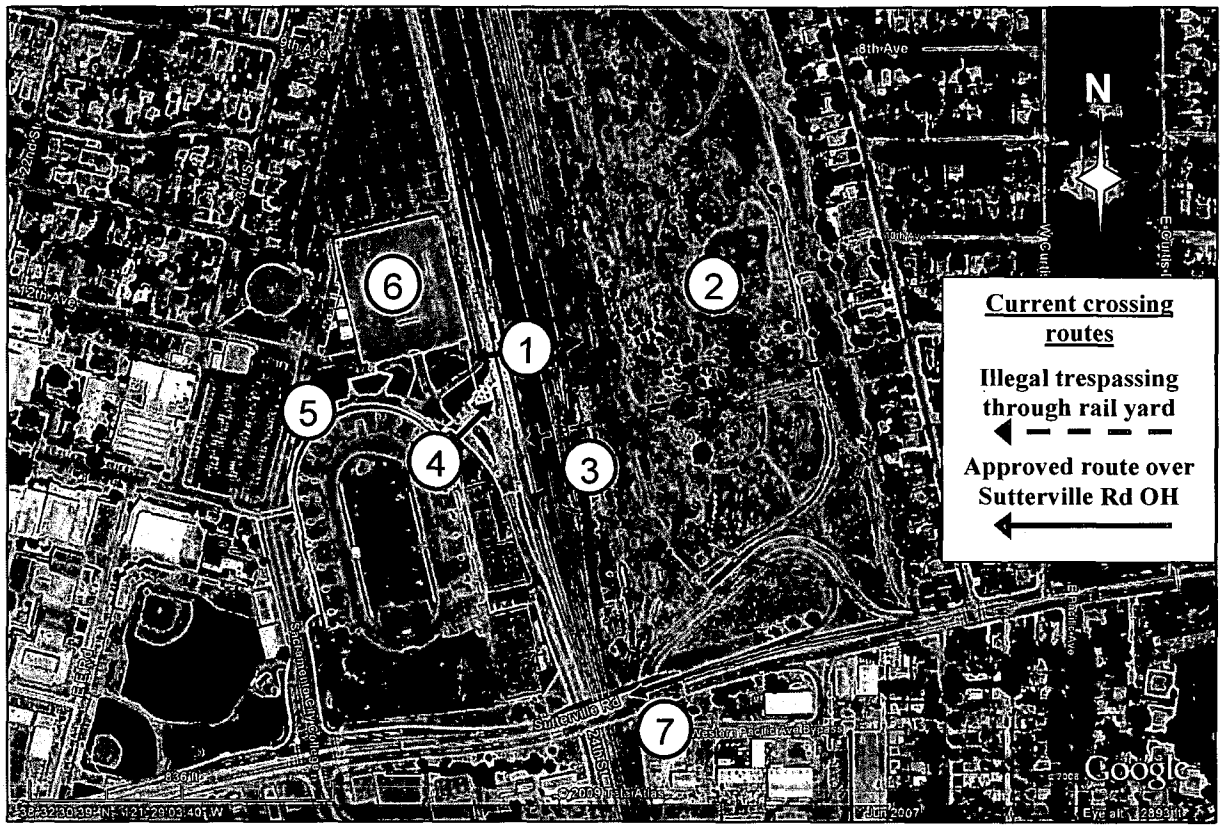
Preliminary engineering performed includes:

Initial environmental studies; surveying, preliminary geotechnical issues assessment, an assessment of drainage and potential for hazardous materials at the site; development of vertical profiles to balance the conflicting needs of American's with Disabilities Act (ADA) compliant grades with railroad vertical clearance requirements, lighting and safety concerns; construction staging, disruption to rail traffic; coordination with major stakeholders comprised of the agencies and landowners directly affected by this project, public outreach efforts designed to inform the local community and gain their support; and coordination with resource agencies to ensure that the proposed project is consistent with environmental requirements. In addition to providing the basis for this Feasibility Study Report, the preliminary engineering was used to develop an estimate of probable project cost, benefits and drawbacks for each alternative, and to support the environmental document, as well as to facilitate future final design.

Project Description

Background

To the east of the rail crossing is the proposed Curtis Park Village project. Development of this site will bring new activity to the area; therefore it is considered one of the catalysts for this project. This study will assume to include this master planned residential and commercial future project as a given. Since the Village is in conceptual stages, the City has the opportunity to work with the developer for a crossing that best meets the needs of the user rather than "forcing" a best fit into an already developed area.



Existing Conditions Around Crossing

Legend:

1. Proposed Bicycle / Pedestrian Crossing (per City Bicycle Master Plan)
2. Proposed Curtis Park Village Development
3. UPRR Maintenance Yard and Main Lines (red lines represent UPRR and LRT tracks)
4. Sacramento LRT Station (the two LRT tracks are to the left)
5. Sacramento City College
6. Parking Garage
7. Sutterville Road Overcrossing (Bridge)

Along the west edge of the project are the Light Rail Station and Sacramento City College. Providing a direct link to the station and safe route for students are key objectives of this project.

Safety

The primary concern for this study is to develop a safe crossing of the UP mainline tracks. Although trespassing through the adjacent UPRR yard and accessing the LRT station from the east side is prohibited, the "draw" of both City College and the LRT station result in numerous trespasses through the UPRR yard and the unprotected LRT tracks outside the limits of the station. With an average of up to ten LRT trains an hour and numerous trains using the two UPRR tracks, including diversions to the five spur lines, crossing this site is considered very risky.

Senior LRT staff and LRT station security personnel have noted that this location is a significant safety concern, even without the increase in pedestrian traffic that will occur once the Curtis Park Village Development is constructed.

Once the Curtis Park Village project construction is built, access to the rail yard will be much easier and the temptation to cut-through rather than to take the longer path over the existing Sutterville Rd. Overhead will be even greater. Most entities, ranging from local community groups to City officials, SACOG and the Environmental Council of Sacramento (ECOS) have expressed this concern. Even though SACOG and ECOS heavily endorse the Curtis Park Village project based on its adherence to the Blueprint principles of in-fill residential projects, they highly recommend the inclusion of a safe pedestrian/bicycle crossing.

The following main safety goals will be accomplished by this project:

- ✓ Provide a safe crossing of tracks.
- ✓ Provide safety to the user of the crossing, including sight distance, railings, and ADA requirements.
- ✓ Provide safety to the local community, LRT users, City College students and all others during construction.

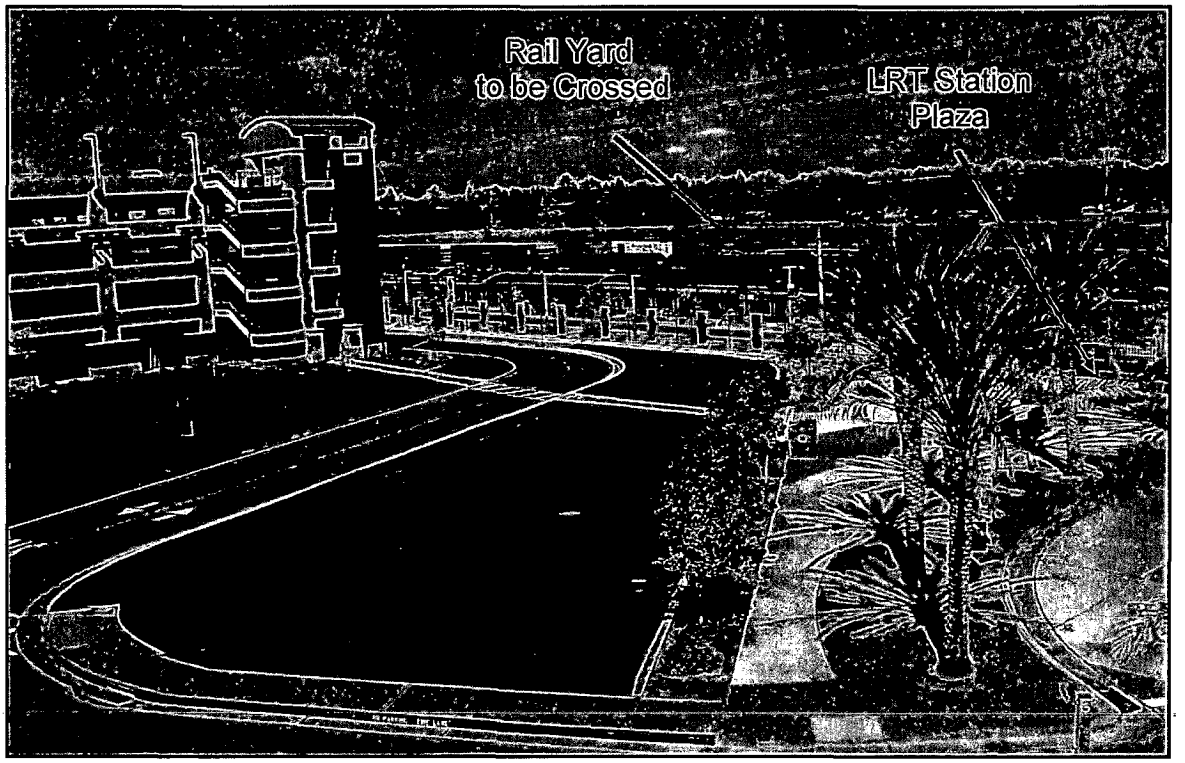
To ensure that the above goals are met, this study evaluates the following safety aspects of the alternatives:

- ✓ Evaluate end of structure access alternatives including ramps, stairs and elevators.
- ✓ On site secured bicycle parking.
- ✓ Evaluate each alternative regarding exposure of user to crime, including sight distance, lighting, and visibility of user from outside of the facility.
- ✓ Construction staging to protect users of the LRT station, other campus pedestrians and bicyclists, and vehicles and busses using the adjacent streets.
- ✓ Protection from exposure during the possible removal of hazardous waste during excavation and grading for the crossing.

Project Constraints

The new rail crossing must conform to the existing conditions as much as possible to both limit costs associated with modifications to such existing elements as roadways, fences, utilities, etc. and to minimize or eliminate disruption to existing railroad operations and to City College. As noted above, this project is being studied at the optimum time in regards to the east approach at the proposed Cutis Park Village where its integration into the final Village plans can be accomplished. However, the west approach at the City College LRT Station is more challenging due to existing constraints, such as the roads, tennis courts, College parking garage, desire of City College to preserve the open spaces (lawns) in that area, and the LRT station.

All leading sites were evaluated and a crossing as close to the LRT station as possible was found to be the best suited and most feasible. Therefore, the most promising locations for the approach are near the grassy area to the north-west of the station entrance and "behind" the parking garage (between the east side of the garage and the LRT tracks). (See photo below).



Likely Location of West Approach Ramp
Looking North-East from Eastern Edge of Sacramento City College

Although these areas would be considered tight to accommodate the approach for some of the crossing alternatives, the approach can be designed to conform to the geometry of these areas.

Additional constraints are limitations imposed by the UPRR for construction within their maintenance yard and adjacent to their main lines, as well as permanent obstructions such as bridge columns. The proposed alternative is sensitive to railroad requirements such as vertical and horizontal clearances, limits on falsework, staging and scheduling to minimize or eliminate disruption to railroad operations.

Right of Way

The primary land owners affected by this project are the Sacramento Regional Transit Authority (LRT), Union Pacific Railroad (UPRR), Los Rios Community College District - Sacramento City College, developers of Curtis Park Village (CPV) and the City of Sacramento (for widening of existing Sutterville Road Overhead alternative). All of these parties have an interest in seeing a positive outcome from this project and will benefit from its completion.

- ✓ The UPRR, which may express concerns as described above in Project Constraints, will benefit by a reduction in liability from the current high rate of trespassers looking for a shortcut across their property to the LRT station and City College.
- ✓ LRT will also benefit due to a reduction in trespassers across their tracks in terms of both liability and the cost of assigning security guards to this location. They will also benefit by having a safe crossing to their station that will better serve their riders and likely increase the number of riders.
- ✓ Sacramento City College will benefit through a safer, more direct route, to their campus for communities to the east, which may also result in an increase in their enrollment.
- ✓ CPV Developer will benefit due to improved access to their new commercial development.
- ✓ The City of Sacramento will benefit by providing this safer crossing for its residents.

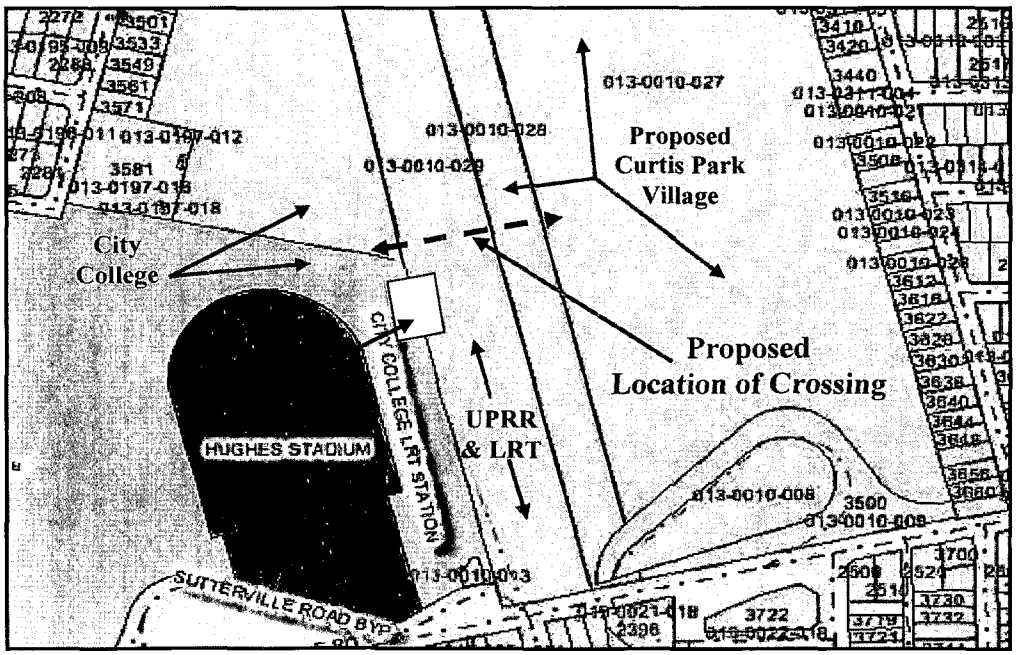
Through the process of developing this Feasibility Study, numerous meetings have taken place with these stakeholders. The focus has been to work with the property owners to show the benefit this project brings them.

Temporary Construction Easements (TCE) from the Sacramento City College, the UPRR, the LRT (who leases from the UPRR) and the developer of the proposed Curtis Park Village (Petrovich Development) will be required for the duration of construction.

The cost for obtaining these easements and rights of entry is estimated to be $75,000. Acquisition of land is not anticipated to be required; therefore, such costs have not been included in the cost estimates for this study.

Although the three main landowners involved, the UPRR, Los Rios Community College District and Petrovich Development Company have all provided tentative agreement for the proposed crossing, the project will still be contingent upon obtaining easements and agreements from each of these entities.

See additional discussion under the following section Public Outreach/Stakeholders.

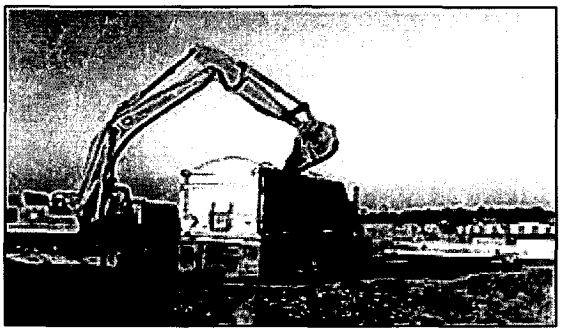


County Assessor's Parcel Map
Showing Parcel Numbers & Right-of Way Lines

Hazardous Materials/Waste

The Initial Site Assessment (ISA) for this project site has been completed. The ISA is critical at this site as the general area of the railroad maintenance yard has previously been identified to contain hazardous materials. The ISA further identified the potential for the presence of hazardous material/waste at the specific location of the crossing.

Additional discussion of Hazardous Materials/Waste issues is provided in Appendix E.



In preparation for the Curtis Park Village Project, a very large volume of contaminated soil has been removed.

Environmental Issues

The proposed project is a City of Sacramento project. Caltrans has NEPA approval responsibility as delegated by FHWA, and the project is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The City of Sacramento is the lead agency under CEQA. Caltrans, as delegated by FHWA, is the federal lead agency under NEPA.

Caltrans, as delegated by FHWA, and will issue a Categorical Exclusion pursuant to NEPA for the proposed project. It is anticipated that Caltrans will issue the Categorical Exclusion in February or March 2010.

An initial study (IS) was prepared with supporting environmental studies, which provides justification for a Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (CEQA) for the proposed project. The Draft IS/MND was circulated to the public for 30 days beginning August 10, 2009. One comment was received on the document and was responded to in the Staff Report prepared for the project for City Council review. A Mitigation Monitoring and Reporting Program prepared for the project will also adopted by the Sacramento City Council concurrently with certification of the MND.

The IS identified potentially significant impacts from the project in the areas of Aesthetics, Hazardous Materials, and Construction Noise. A draft report and technical studies have been prepared and are available for review. [See Reference C.]
Additional discussion of environmental issues is provided in Appendix D.

Utilities

Based upon research and field visits, relocation of some utilities in the proposed project area is required. It is important to ensure that utility location and coordination begins at the earliest possible stage. Therefore, in preparation for the following design stage, each utility company with facilities in the project area has been notified of this project.

As part of this notification, the utility has been asked to provide record information and identify the locations of all existing facilities. The utility companies with facilities in the project area include Pacific Gas and Electric (PG&E), Regional Transit, Sacramento Municipal Utility District (SMUD), SureWest TeleVideo, Comcast, Level 3 Communications, MCI Worldcom, Sprint, and Teleport Communications.

Of these responses, it is anticipated that only one utility will be of a critical concern regarding the proposed alternative (bridge crossing). This utility is a set of high power lines along the west edge of the UPRR and LRT right-of-way belonging to SMUD. The City provided SMUD with a copy of the General Plan, location & geometry, and other pertinent information on the proposed alternative, and SMUD is agreeable to relocating the lines. The relocation of the lines would be to a higher elevation along the same current alignment. This raise will involve several new poles in addition to the line work. SMUD has provided a preliminary estimate of the cost to perform this work as being between $100,000 and $200,000. The upper limit cost of $200,000 is being assumed for budget purposes in this report.

For a complete table of identified utilities, their description, location, owner, and relocation requirements, as well as for copies of the Utility Letters, see Appendix C.

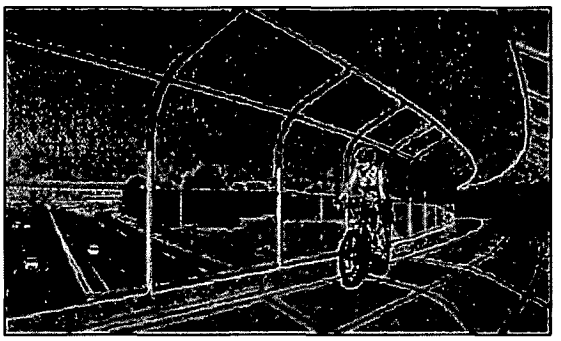
Design Guidelines

A summary of design guidelines for the City College Light Rail Station Pedestrian/Bicycle Crossing Project are provided in Appendix G. Because the proposed alternative for this crossing has been selected, as will be discussed in the following section, "Proposed Alternative," including horizontal and vertical alignment for the proposed bridge and approach ramps, the discussions and guidelines contained in the appendix primarily relate specifically to that alignment.

Aesthetics

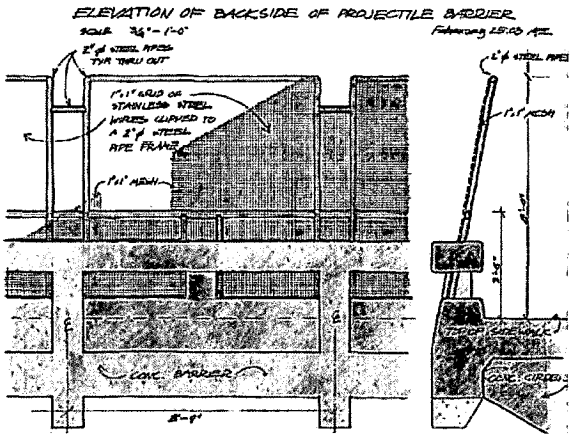
The proposed project has the potential to become a significant architectural element for the area. The development of appropriate architectural features, such as approach, entry monumentation, bridge barriers/railings, and lighting to create a unique and attractive "experience" should the project ultimately incorporate these treatments.

It is anticipated that during the final design phase, architectural requirements will be further defined by the City and key stakeholders.



Fencing along PUC near Folsom, CA

One of the challenges to the aesthetics of the project and for the user experience will be the BNSF railroad requirement of an 8'-3" tall, with 3'-0" inward overhang, fence over their right-of-way. The photo to the left shows the pedestrian overcrossing over Hwy. 50 near Folsom, CA. Caltrans has similar fencing requirements over state highways.



Elevation of backside of projectile barrier
Courtesy of MacDonald Architects

Aesthetically pleasing alternatives to the basic chain-link fence option have been proposed on recent projects. The rendering to the right shows one such alternative.

The major goals to be addressed at that time will likely include:

- An architectural enhancement program to develop appropriate crossing features to create a unique and attractive crossing "experience".
- Provide continuity between City College, the LRT station and the future Curtis Park Village.

Where feasible, the following options should be studied and implemented:

- Incorporating planting as a component of project design;
- Using stamped concrete or other aesthetics treatments on hard structures.
- The trail entry monuments, railing, fencing, and lighting design for the project should be chosen to incorporate features that are consistent with City policies and that meet the desired visual character of the area.

The purpose of these improvements is to enhance the perception of the new crossing to the visitor, when viewing from afar, or when traversing the bridge.

Detailed Considerations

Lighting

For accident safety and security reasons lighting of the traveled way surface shall be a high priority in lighting design. Sightline issues, as noted above, become of greater concern before and after daylight hours. Lighting shall be used to mitigate these concerns to the extent possible. However, this must be balanced with preventing stray light and glare into adjacent neighborhoods.

Graffiti

Graffiti is a concern for this project. Because graffiti removal programs which do not result in immediate removal often prove ineffective, graffiti deterrence, through design, is preferred. During the final design phase of this project, particular attention should be paid to the avoidance of large flat surfaces, and to avoid lighting which highlights flat surfaces. Architectural textured surfaces with irregular surfaces that would not show the intent of the graffiti well should be considered for the lower ramp levels. In addition, screens in conjunction with higher fences, along any portion of a bridge crossing adjacent to a building, such as the west ramp along the City College parking garage and east ramp along retail/commercial buildings in the proposed Curtis Park village development.

Construction Staging and Issues

The LRT station must remain open during construction and only minimal to no impact on railroad operations will be acceptable to UPRR. Construction staging and techniques that minimize disruption to rail traffic and safety for the LRT station users during construction must be addressed, as well as limiting noise impacts on the local community.

The project site has adequate clearances and access roads for construction of the various types of structures. Potential staging areas have been identified. These staging areas include a portion of the City College parking lot north of the parking garage, UPRR maintenance yard areas outside of the LRT UPRR main line and UPRR spur track corridor, and areas of the proposed Curtis Park Village depending on the phasing/status of that project at the time the crossing is constructed.

During the final design stage, negotiations will be required with these entities to exactly define those areas that will be available for the contractors use.

Falsework

This section pertains primarily to the bridge alternatives. For this project, the main concern regarding falsework is the potential impacts on railroad operations during erection and tear down, as well as safety of users of the LRT station.

Cast-in-place / Prestressed Concrete (CIP/PS) Box Girder Alternative –

For the CIP/PS Box Girder alternative, falsework would need to be erected along the entire length of the crossing. The construction of the main spans will require close coordination with the UPRR and LRT for falsework opening clearances and work windows for erecting the falsework. Additional negotiations with the UPRR will be required to place falsework bents within the maintenance yard spur tracks. It is anticipated that at least one of the spur tracks will be temporarily obstructed. At the LRT station, providing protection for pedestrians by erecting shields for debris or restricting pedestrians from the work areas will be a high priority.

The west approach ramp will require a falsework opening over the existing Sacramento City College access road along the east side of the parking garage and the east approach ramp may require a falsework opening over the proposed access road (currently designated as Road "C" by the developer) that runs along the back southern edge of the project, adjacent to the UPRR right-of-way line, depending on the phasing/status of that project at the time the crossing is constructed.

Precast Girder Alternative –

For the precast girder option, only the main spans over the UPRR and LRT tracks would be precast. However, due to the length of the longest span, a splice will be required. This would be best facilitated by using a temporary bent to support the two ends of the girders during initial erection, prior to splicing (with continuity post tensioning tendons. This operation will require close coordination with the UPRR and LRT as well as negotiations with the UPRR for location of the temporary bent as it will obstruct a spur line.

The approaches, due to sharp radii and adequate available space for falsework, will be cast in place similar to the CIP/PS Box Girder alternative.

Underground options –

Although openings for falsework are not a concern for the underground (tunnel) options, construction staging is complicated due to requirements that railroad operations not be impacted. Construction of the crossing under the two LRT tracks, two UPRR main line tracks and UPRR spur tracks will require multiple stages to ensure that rail traffic can continue unimpeded. Options to meet this goal may include providing spur tracks for the LRT and main lines or jacking of precast tunnel segments under the active tracks.

Public Outreach / Stakeholders

Overview

Understanding the importance of community outreach and stakeholder involvement, the City conducted a comprehensive public outreach program. The two-phase approach involved initial stakeholder meetings to assist in developing a preferred alternative and obtaining input about community outreach. The second phase, implementation, involved reaching out to stakeholders and the community around the project area to inform them about the project and preferred alternative. Phase two activities included distribution of fact sheets, newsletters, postcards, e-communications, an interactive Web site and presentations to stakeholder groups as outlined in the following report.

The project team considered the suggestions and input from all stakeholders and incorporated them as much as possible into the preferred alternative.

Public Outreach Goal

The public outreach goal was to proactively inform the public and stakeholders about the Sacramento City College Light Rail Pedestrian/Bicycle Crossing Project's purpose, benefits, design and potential impacts. The goal focused on building support among those in the community with a desire to see alternate transportation grow through proactive and informed public outreach. Resident and business concerns were addressed and input was solicited regarding various alternatives.

Outreach Objectives

Key objectives of the public outreach program were developed after initial research was conducted. The objectives included:

- Communicate project status and progress clearly and consistently with the community and stakeholders.
- Assist the project team in soliciting community and stakeholder input and feedback about project elements and design alternatives.

Through inclusive stakeholder and community outreach, the City of Sacramento Department of Transportation accomplished the outreach objectives.

Stakeholders

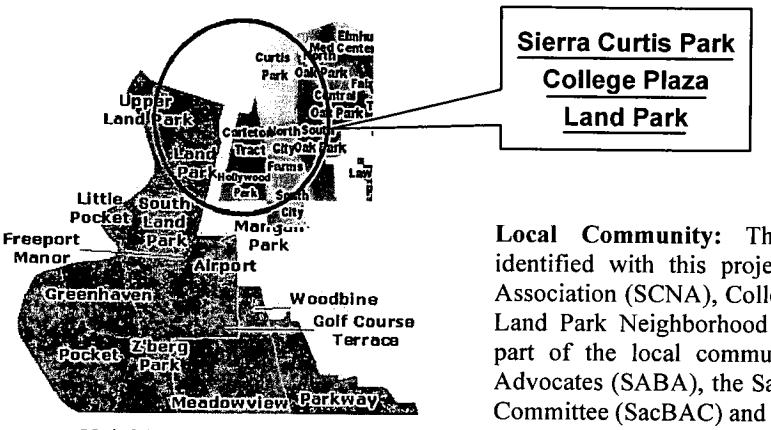
Three primary groups of stakeholders have been identified for this project:

1. Land Owners
2. Local Community
3. Utilities

Land Owners: The primary land owners affected by this project are the Sacramento Regional Transit Authority (LRT), Union Pacific Railroad (UPRR), Los Rios Community College District - Sacramento City College campus, Petrovich Development - developers of Curtis Park Village and the City of Sacramento – in regards to Sutterville Rd. Overcrossing Widening alternative only. All of these parties have an interest in seeing a positive outcome from this project and will benefit from its completion. Through the process of developing this Feasibility Study, numerous meetings have taken place with these stakeholders. The focus has been to work with the property owners to show the benefit this project brings them.

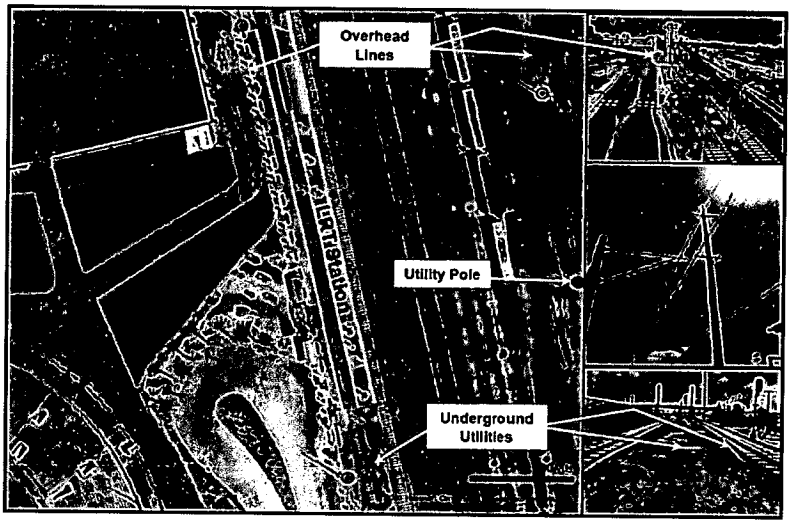
The basis for the type of structure and geometry for the selected alternative (discussed below) includes the results of these meetings. Each of the above stakeholders has provided the City of Sacramento with verbal approval of the selected alternative. The common theme expressed by all stakeholders is that the project should improve the safety of those residents, including LRT users and City College students, who must travel between points east and west of the railroad maintenance yard. Specifically, the UPRR will benefit by a reduction in liability from the current high

rate of trespassers looking for a shortcut across their property to and from the LRT station and City College.



Neighborhood Associations

Local Community: The primary local community groups identified with this project are the Sierra Curtis Neighborhood Association (SCNA), College Plaza Neighborhood Association and Land Park Neighborhood Association (LPNA). Also included as part of the local community are the Sacramento Area Bicycle Advocates (SABA), the Sacramento City/County Bicycle Advisory Committee (SacBAC) and WALKSacramento.



Utility Locations

Utilities: Utilities are a special group of stakeholders as they are generally located on land owned by other entities and are governed by the requirements of the easements they have been granted. Especially for those utilities which must be modified or relocated, it is important that the owners of the utility be notified as soon as possible. Refer to "Utilities" above for more information.

[See Appendix A for additional Public Outreach information]

Alternatives Study

Crossing Alternatives - Considered

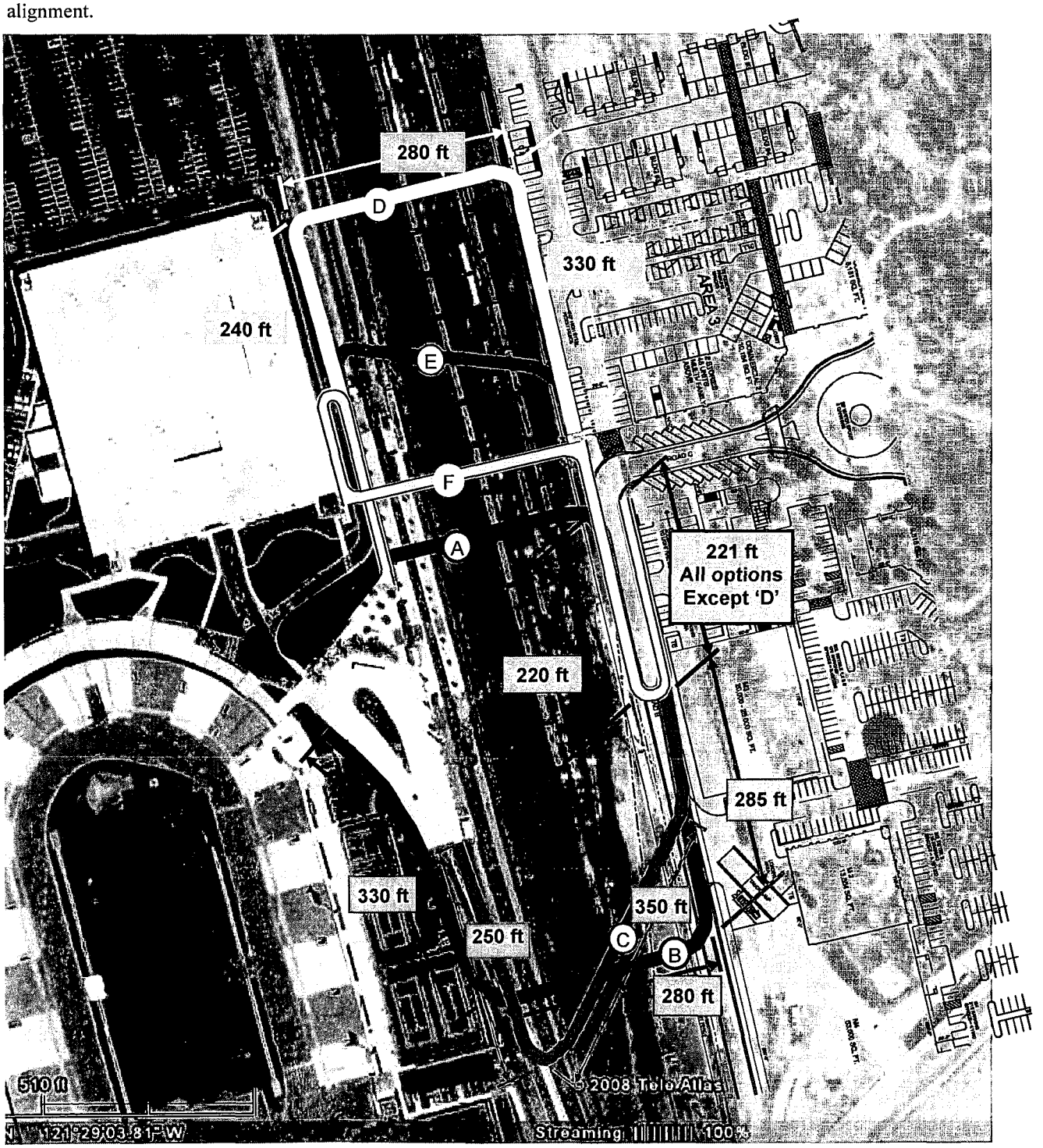
Alternatives	Crossing Type	Clear Width	Length	Comments
1A (Preferred Alternative)	Bridge W/ ramps	10'	1,164' measured along CL of the PUC, including ramps	3-Span CIP/PS Box Girder w/ CIP/RC ramp approaches
1B	Bridge W/ ramps	10'	1,164' measured along CL of the PUC, including ramps	3-Span PC/PS Girder w/ CIP/RC ramp approaches
1C	Bridge W/ ramps	10'	1,230' measured along CL of the PUC, including ramps	1-Span Tied-Arch w/ CIP/RC ramp approaches
2	Bridge W/ elevator	10'	290' measured along CL of the PUC	3-Span CIP/PS Box Girder w/ elevator and stairway approaches
3	Tunnel – cut and cover	12'	830' measured along CL of the P)C, including ramps	Continuous culvert with open approach ramps
4	Tunnel – rails on bridges	12'	830' measured along CL of the POC, including ramps	Continuous open channel w/ rails carried over on simple spans with open approach ramps
5	Widen Sutterville Road UC	12'	400' measured along CL of Sutterville Road Undercrossing	Widening of existing bridge with ramps on widened approach embankments
6	At Grade crossing	10'	230' measured along CL of the crossing	Signaled and gated at grade crossing of UPRR and LRT tracks

Abbreviations:

CL center line
PUC Pedestrian under crossing (crossing that allows the facility being crossed such as a road or railroad to pass below the crossing)
POC Pedestrian over crossing (crossing that allows the facility being crossed such as a road or railroad to pass over the crossing)
CIP/PS Cast-in-place / Prestressed Concrete
CIP/RC Cast-in-place / Reinforced concrete

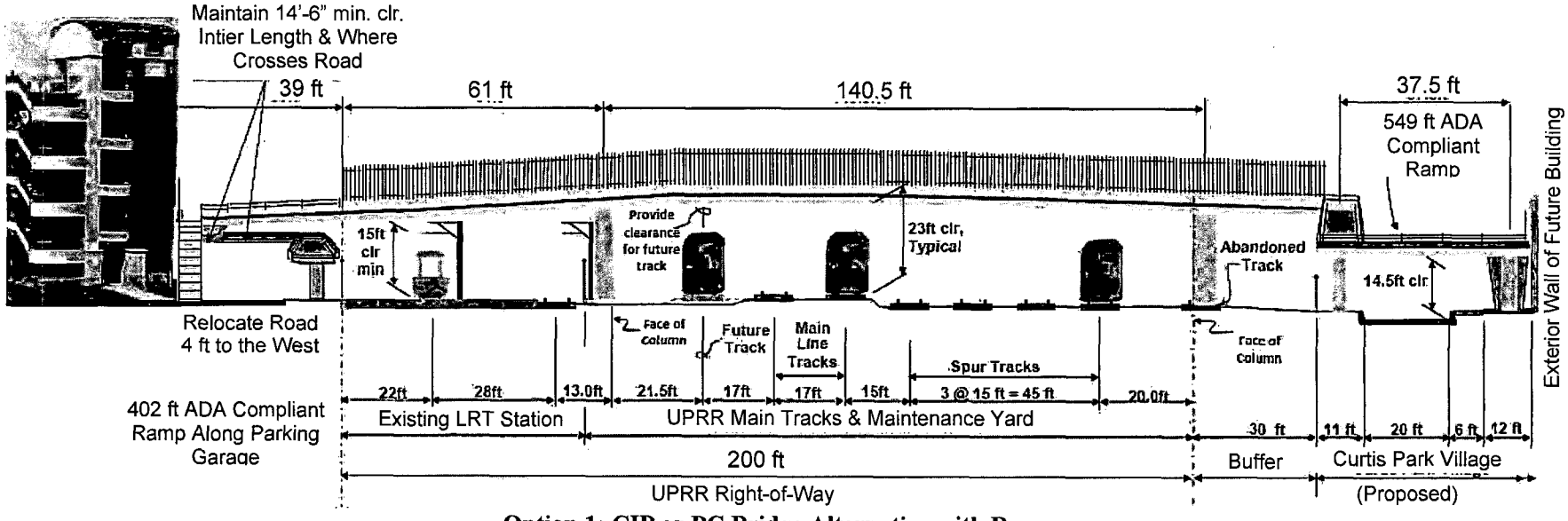
Bridge Options For Alternative 1 (1A & 1B)

The aerial image below shows the various alignments evaluated for Alternative 1 (1A & 1B). These alignments were discussed with the major landowner stakeholders where alignment "F" was ultimately adopted as the preferred alignment.



Alternative 1A –CIP/PS and

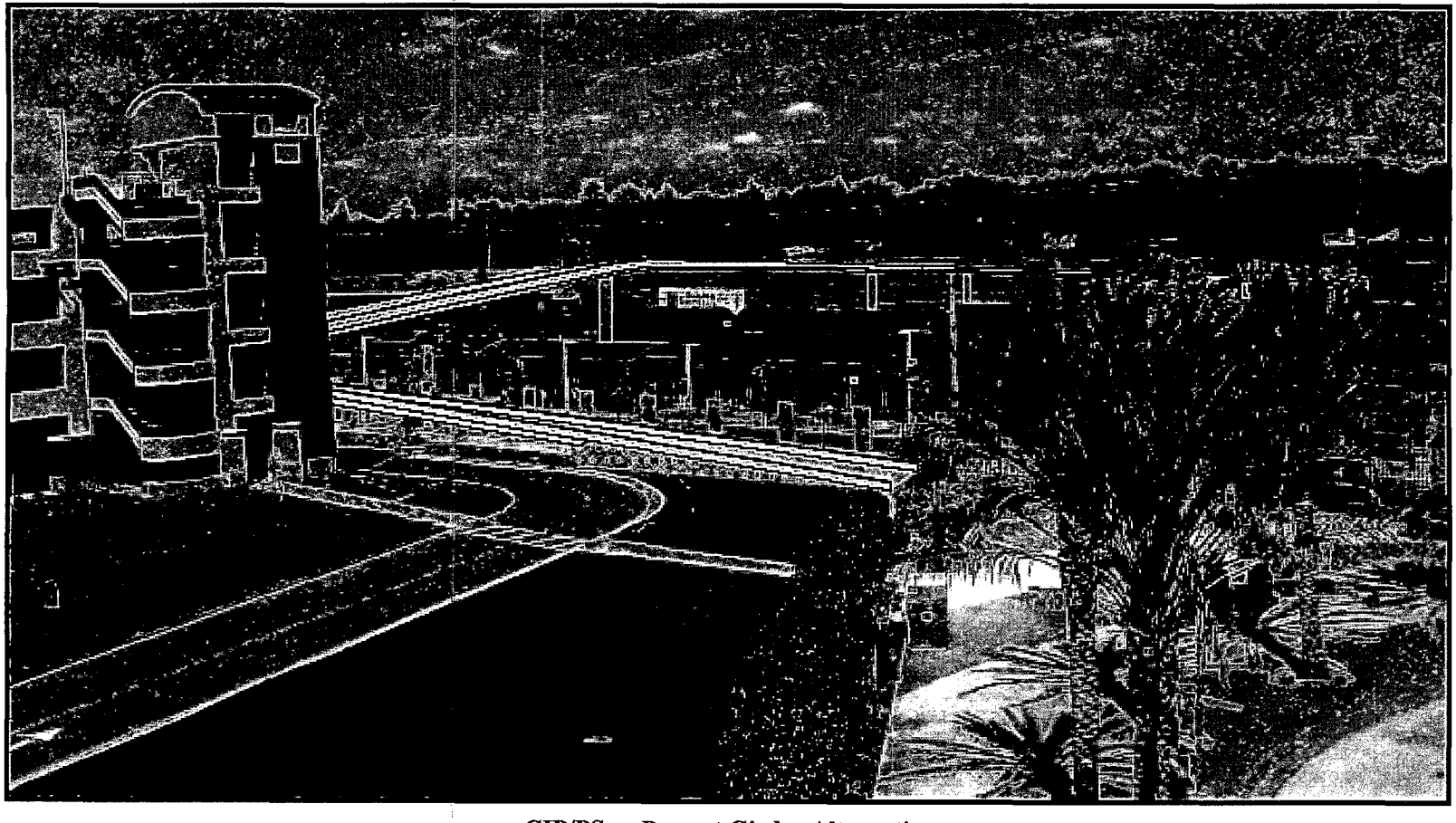
Alternative 1B –Precast Girder



Option 1: CIP or PC Bridge Alternative with Ramps

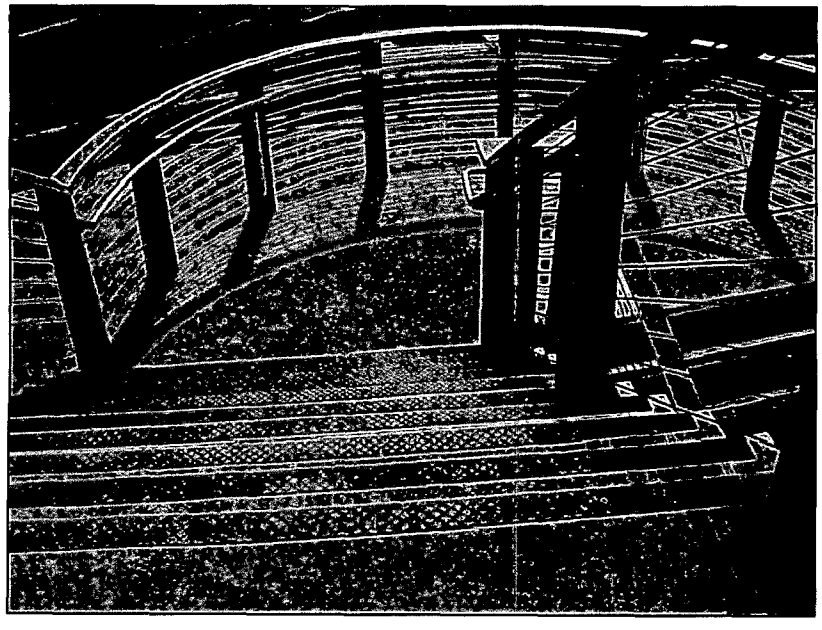
Crossing Type	Benefits	Concerns
	Alternative 1A (Preferred Alternative)	
CIP Bridge W/ ramps	• CIP offers the greatest opportunity to meet the tight geometry. • It is likely the most cost effective alternative that fully meets the goals of the project. • Foundation types limit the amount of excavation into the potentially contaminated soil.	• Due to the necessity of maintaining minimum clearances over the access roads, and maintain ADA standards, the ramps will be very long. • Potential impact to rail traffic during construction due to falsework.
	Alternative 1B	
Precast Bridge W/ ramps	• Limits disruption to the UPRR and LRT traffic. • Foundation types limit the amount of excavation into the potentially contaminated soil.	• Due to the necessity of maintaining minimum clearances over the access roads, and maintain ADA standards, the ramps will be very long. • Potential impact to rail traffic during construction due to erection of girders and possible temporary falsework bent to splice the long main span girder.

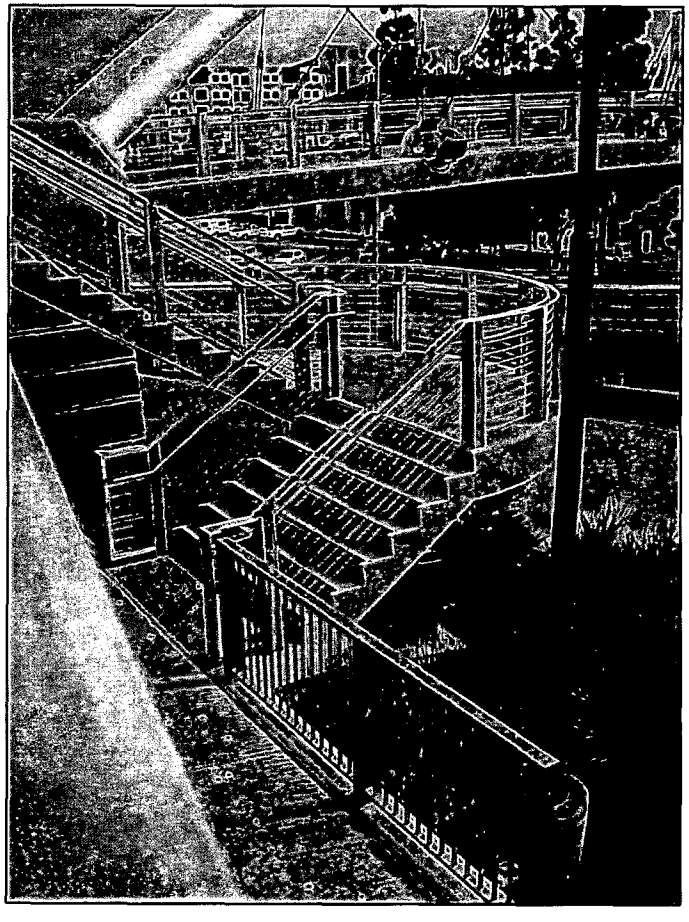
Photo Rendering of Alternatives 1A and 1B



CIP/PS or Precast Girder Alternative
Photo Rendering

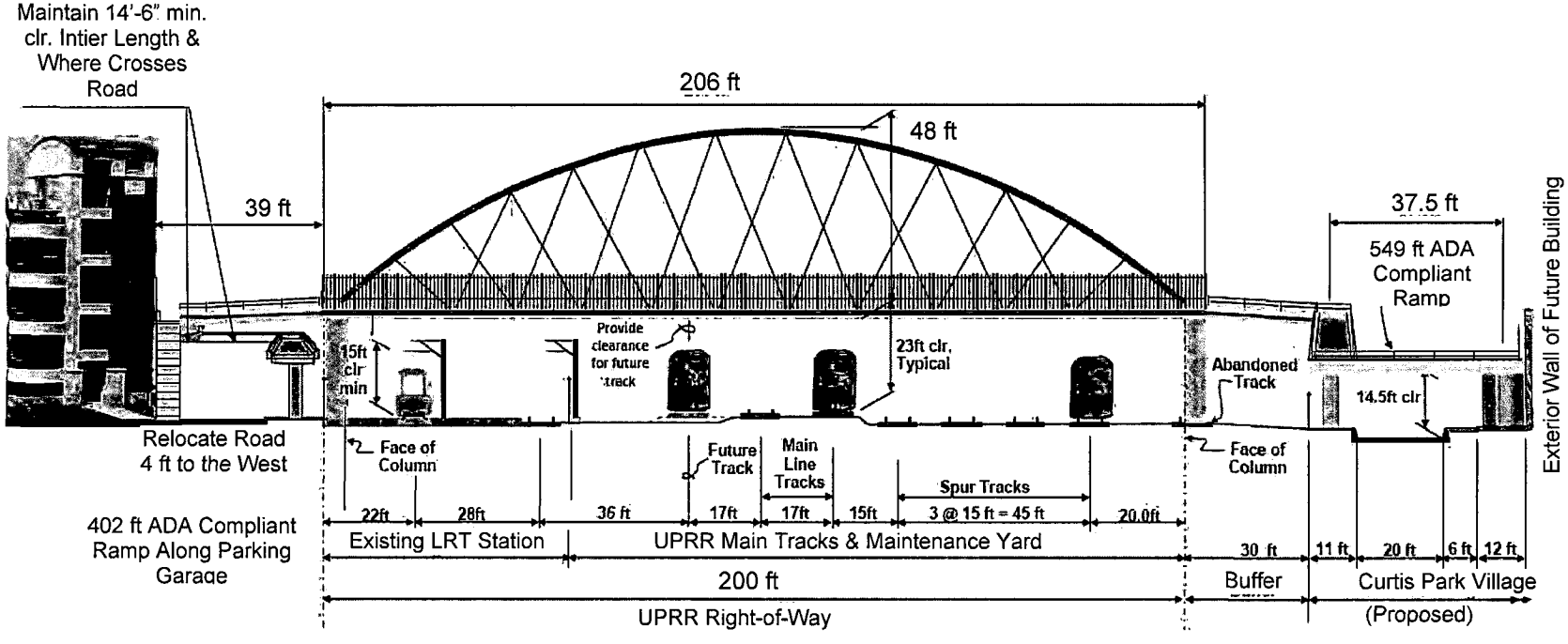
Example of Stairs With Open Railing for Visibility:





In addition to providing a shorter path for pedestrians, placing stairways at the ends of the main span crossing offers an opportunity to create an inviting entrance to the crossing. High priority for stairways include ease of maintenance (such as eliminating areas for trash and debris to accumulate, and minimal to no painting), open railing to eliminate areas that are out of few from the user and from those nearby (for safety reasons), durability against vandalism, and pleasing appearance.

Alternative 1C –Tied- Arch



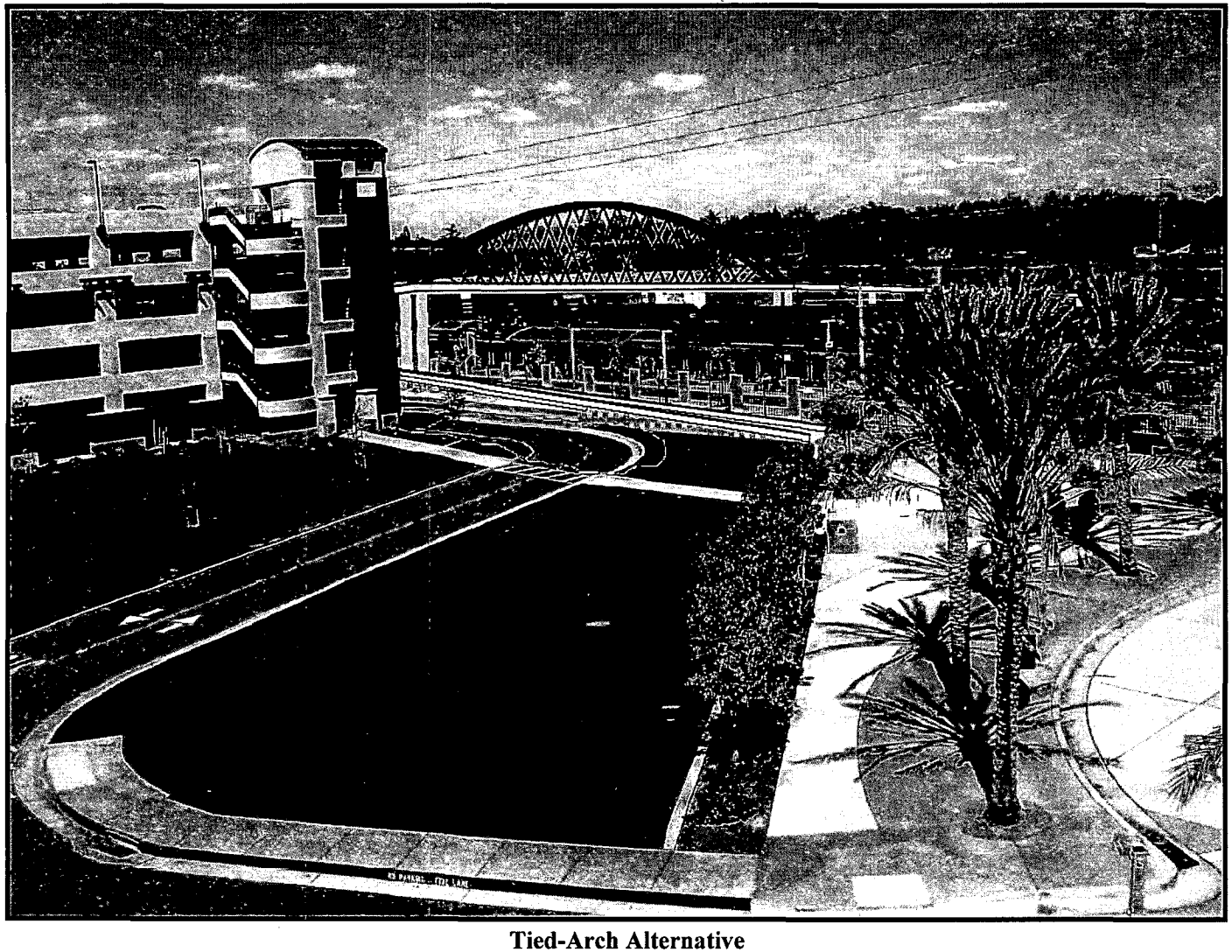
Tied-Arch Alternative
Looking North

Crossing Type	Benefits	Concerns
	Alternative 1C	
Tied - Arch W/ ramps	• Limits disruption to the UPRR and LRT traffic with nearly a complete span of the UPRR right-of-way. • Foundation types limit the amount of excavation into the potentially contaminated soil.	• Much higher cost than Alternatives 1A and 1B. • Requires tangent deck section for tie, resulting in higher ends, which will require longer ramps than those for Alternatives 1A and 1B. • Potential for greater impact to rail traffic during construction, than for Alternatives 1A and 1B, during erection of arch and hangers. • Existing SMUD high power lines along west edge of LRT corridor must be raised with any bridge alternative. However, the tied arch may require the lines to be moved higher than the other bridge alternatives.

Example of a similar Project:

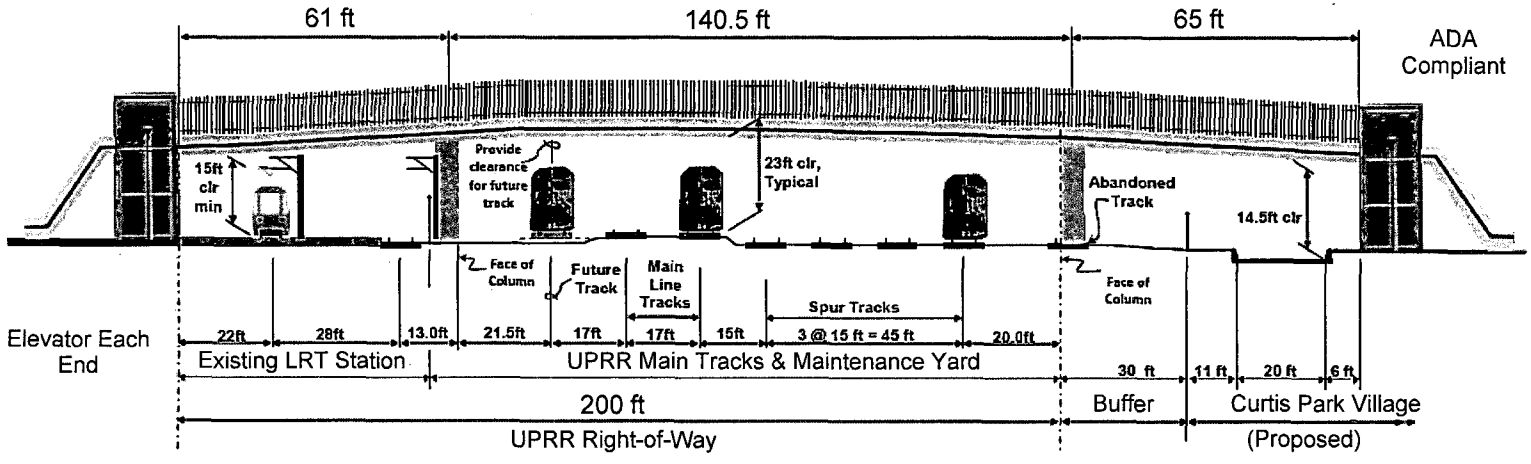
Example of Arch Alternative
San Diego State University

Photo Rendering of Alternative 1C



Tied-Arch Alternative
Photo Rendering

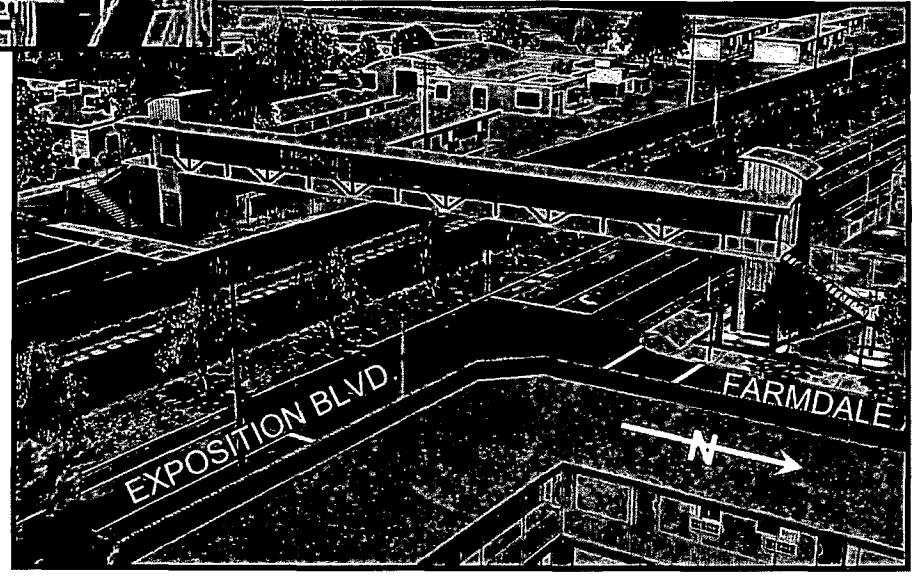
Alternative 2 –CIP/PS or Precast Girder w/ Elevators



Option 2: Bridge Alternative with Elevators and Stairs

Crossing Type	Benefits	Concerns
	Alternative 2	
CIP Bridge W/ elevator	• The smaller footprint of the elevators is an advantage in terms of right of way required. • The elevators will reduce the length, and usually time, required to complete the crossing.	• Maintenance of the elevators. • Safety during night hours. • Not preferred by most bicyclists.

Examples of a similar Project:



Due to the high cost of operating and maintain elevators, and the concern of safety and vandalism, elevators are generally reserved for locations with no other options, or where operating and maintenance budget is available.

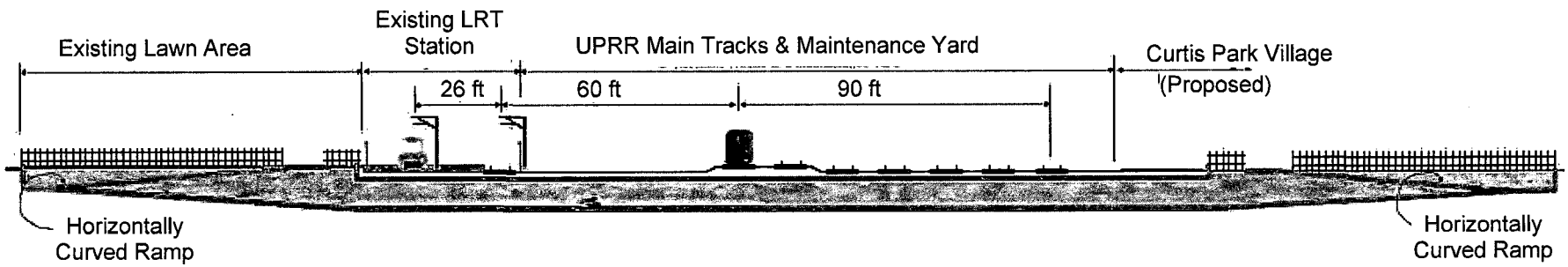
In the photo above, elevators were required to access the rail station located at the bottom of the steep sided rail corridor depressed section.

The photo to the right is a rendering of a proposed project located in an existing neighborhood where space for long ramps are not available.

Examples of Bicycle / Pedestrian Bridge with Elevator Access

Below Ground Options

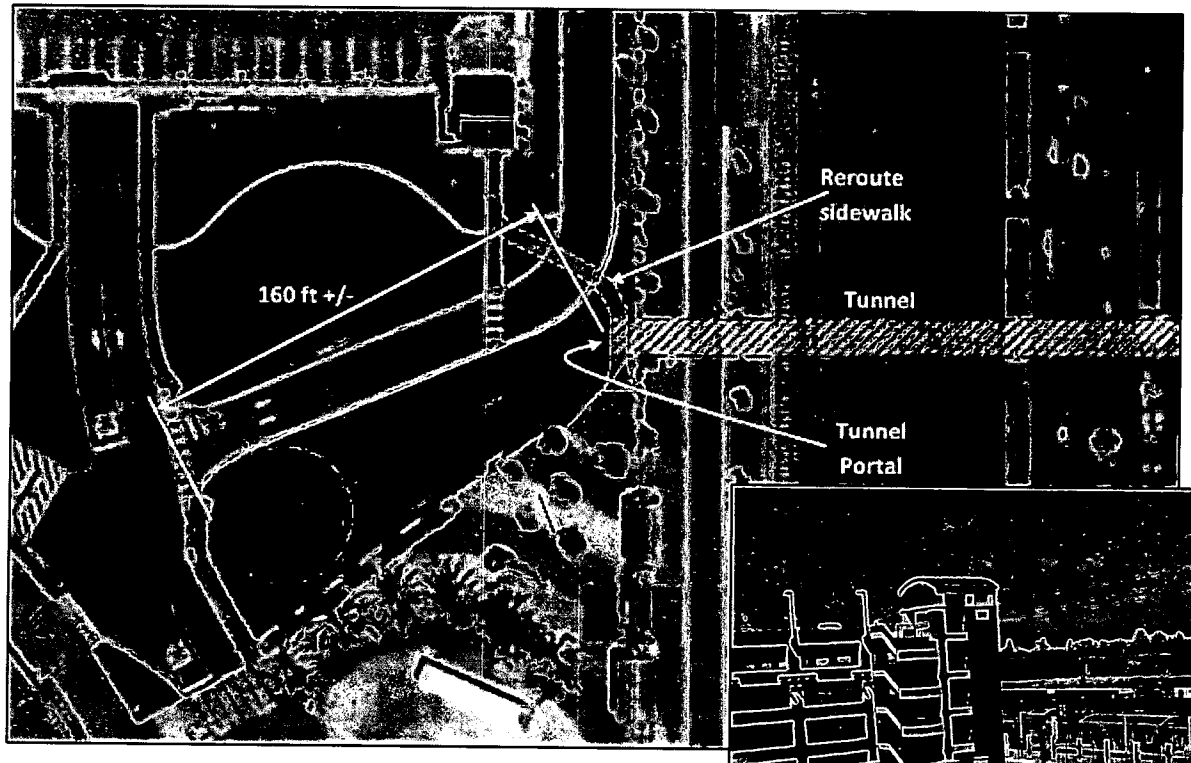
Alternative 3 – Tunnel – cut and cover

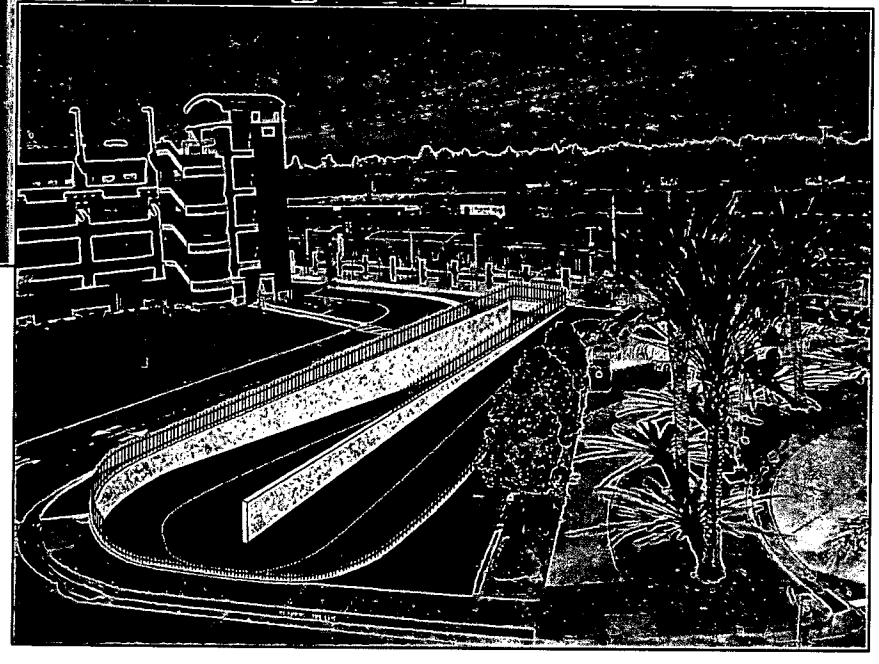


Precast Segmental Tunnel Sections - Jacking Under the Rail Lines May Also be an Option

Crossing Type	Benefits	Concerns
	Alternative 3	
Tunnel – cut and cover	• Avoids visual impacts associated with the bridge options. • Elevation change (between ground surface and bottom of tunnel) would be less than for the bridge options resulting in shorter approach ramps.	• Will require extensive excavation of contaminated soil. • Construction will have to be phased to provide for rail traffic. • Depressed approaches will require a larger impact on permanent right of way. • Due to impact to City College property, not supported by the Los Rios Community College District. • Safety of users due to long confined area. • Introduces new structures over which heavy rail must operate. Will be opposed by UPRR.

Layout of Ramp to West Portal:

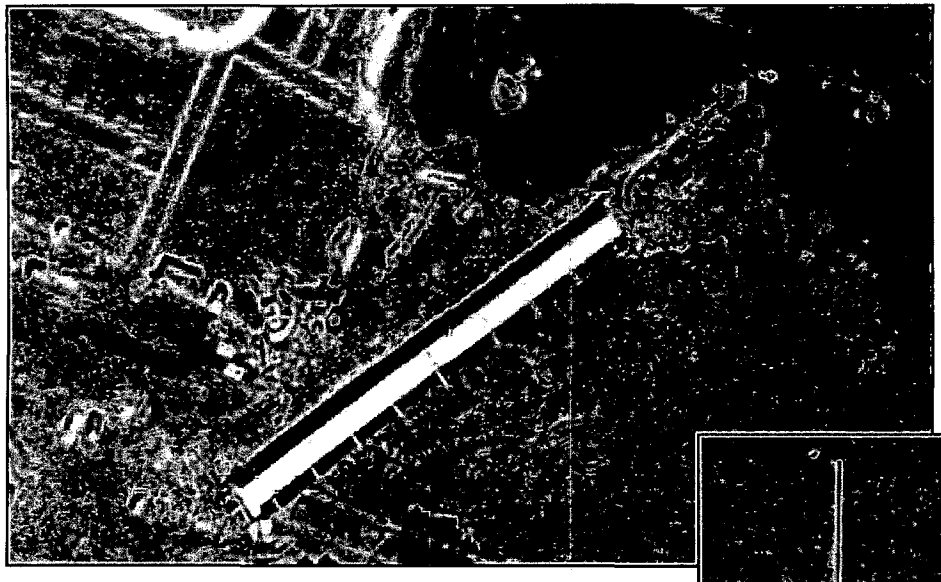




These renderings are show for discussion purposes only. The tunnel portal shown is at the west end of the crossing on City College property. As previously noted, the school district has decided that this open space is not available for the crossing approach structures.

In addition, the developer of the Curtis Park Village project on the east end of the crossing has also determined that they would not accept a crossing alternative that required such a large area of exclusive use for the crossing on their property.

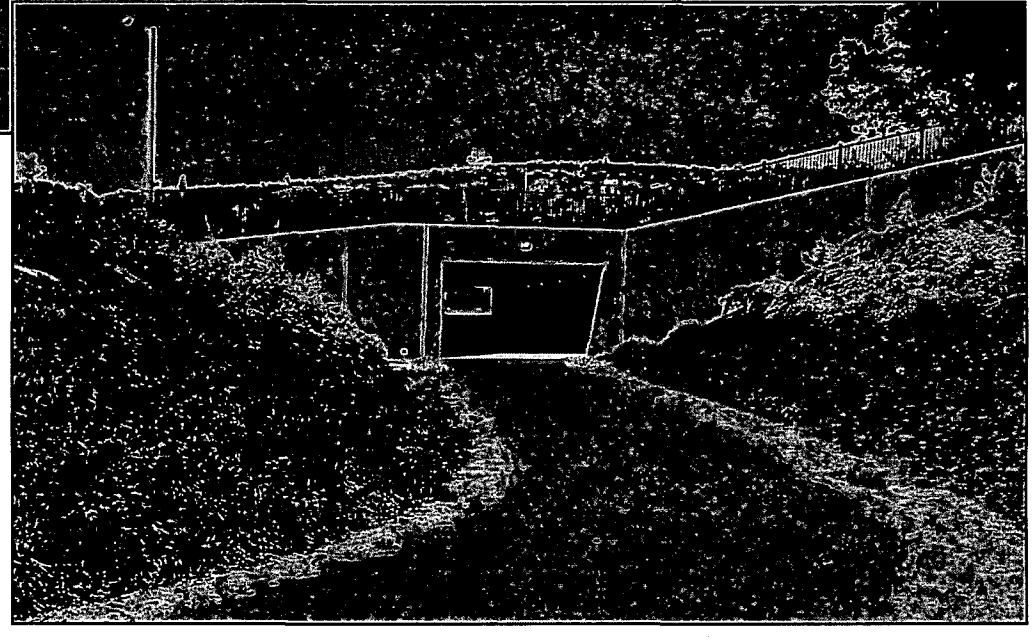
Example of a similar Project:



Broadstone Pkwy Undercrossing, Folsom, CA
Satellite Image During Construction

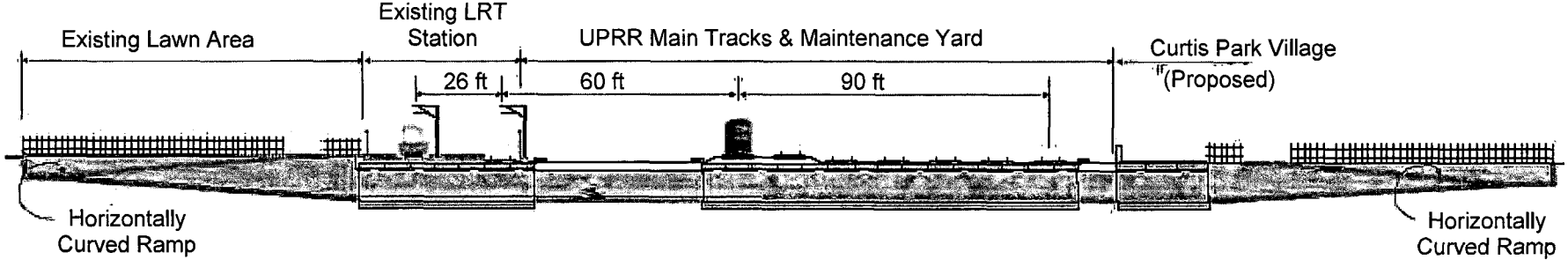
The project shown in the photos is the Broadstone Pkwy Undercrossing. It is similar in length to this project; however, there are a few dissimilarities that made it feasible:

- The tunnel was constructed in an area of new development before the roadway, under which it crosses, was completed.
- The north end (left end in above photo) exits in the side of the raised roadway embankment and an approach portal is not required as the tunnel exits at the same elevation as the continuing bike path.
- The south end portal wraps around a detention pond where adequate open space was available without altering the adjacent infrastructure for a new high school.
- High use periods are monitored by school staff for safety.



Broadstone Pkwy Undercrossing, Folsom, CA
South Portal

Alternative 4 – Tunnel – Rails



Underground Alternative – Undercrossing
Open Cut Pedestrian/Bicycle Path with Rails Supported on Bridge structures

Carried by Bridge Spans

Crossing Type	Benefits	Concerns
	Alternative 4	
Tunnel – rails on bridges	• Avoids visual impacts associated with the bridge options. • Elevation change (between ground surface and bottom of tunnel) would be less than for the bridge options resulting in shorter approach ramps.	• Will require extensive excavation of contaminated soil. • Construction will have to be phased to provide for rail traffic. • Depressed approaches will require a larger impact on permanent right of way. • Due to impact to City College property, not supported by the Los Rios Community College District. • Safety of users due to long confined area. • Introduces new structures over which heavy rail must operate. Will be opposed by UPRR.

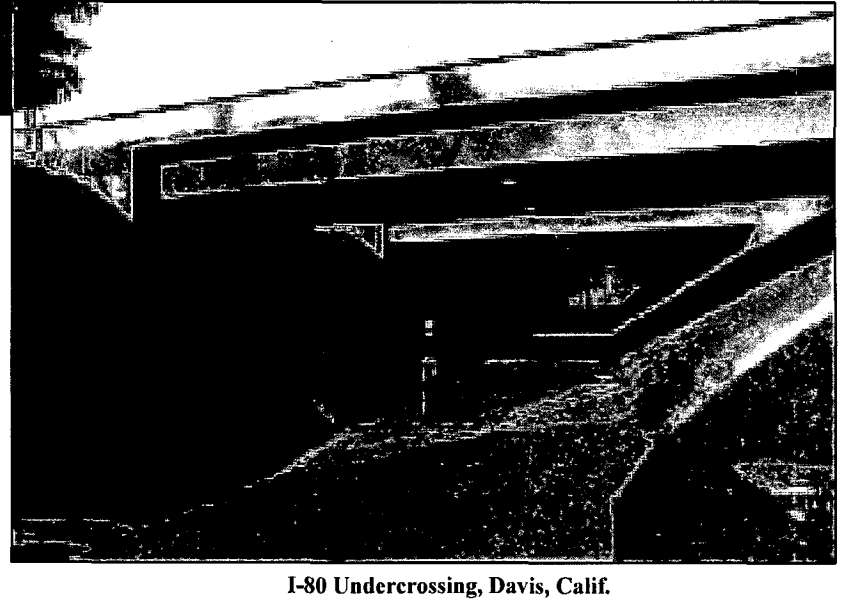
Examples of a similar Project:

Placer Kills RR Undercrossing
Auburn-Colfax Road - Part of Grass Valley-Colfax

Undercrossing consisting of bridges to carry the rail tracks over the undercrossing fall into two main categories:

1. The undercrossing walls form abutments to support the bridge(s). (see photo above)
2. The undercrossing consists of a cut section through the earth with sloped sides where the bridge(s) must be supported by separate abutments. (see photo to the right)

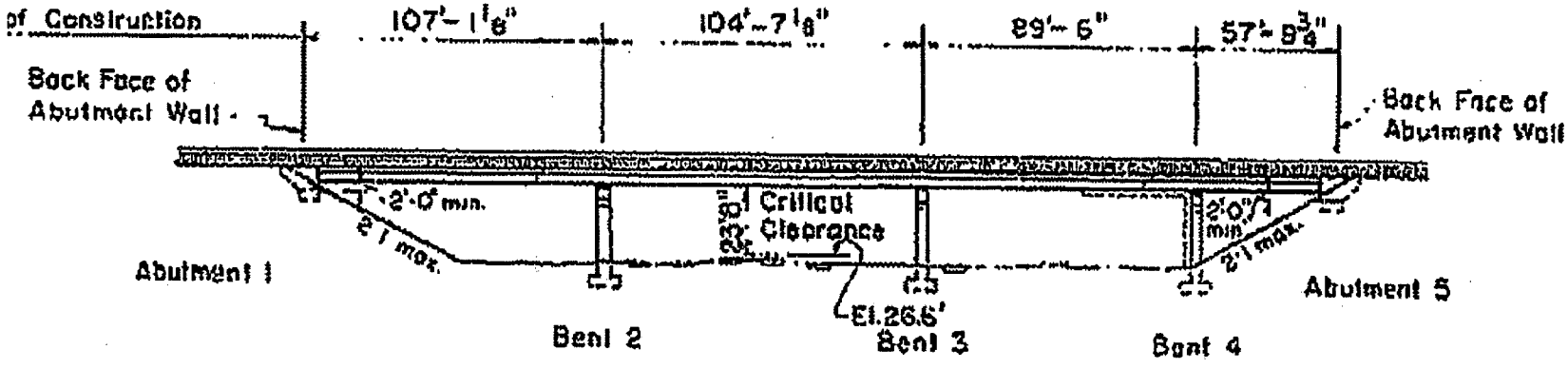
In either case for this project, bridge structures for eight tracks would be required. Most of these lines are very close together and it is assumed that the UPRR would require access between the tracks for their maintenance operations. It is likely that the result would be a solid "lid" type structure (continuous bridge along the entire length of the crossing).



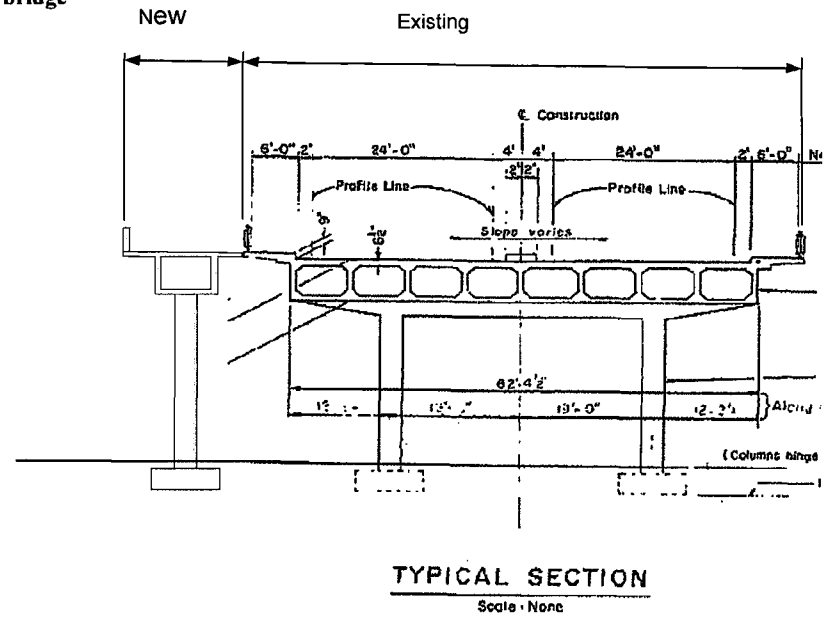
I-80 Undercrossing, Davis, Calif.

Other Options

Alternative 5 – Sutterville Road Overhead Widening Option



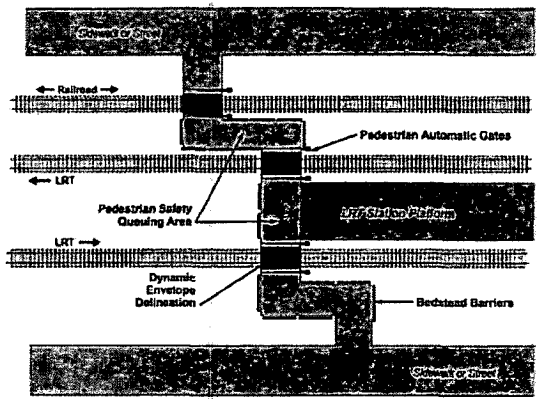
Sutterville Road Overhead Widening
Parallel structure abutted along the north edge of the existing bridge



Crossing Type	Alternative 5
	Benefits
Widen Sutter Street UC	• This alternative has many merits including likely lower construction costs, less right-of-way issues, additional area for the west approach to accommodate ADA requirements, and avoidance of disruption to the users of the LRT station.
	Concerns
Widen Sutter Street UC	• May not draw many additional users than the current sidewalk across the existing bridge. • Would remain a more circuitous route between the existing and future neighborhoods to the east and the LRT station and center of City College.

pt

Alternative 6 – At Grade Crossing Option



At Grade Crossing Schematic of Concept

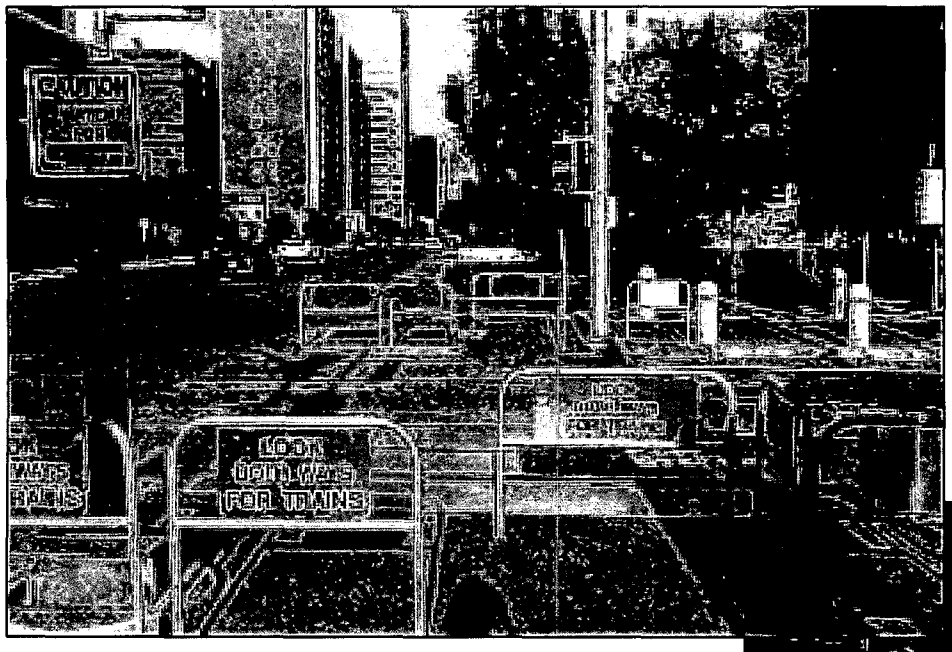
This schematic was taken from the Transit Cooperative Research Program (TCRP) Report No. 17 - Integration of Light Rail Transit into City Streets (Part C).

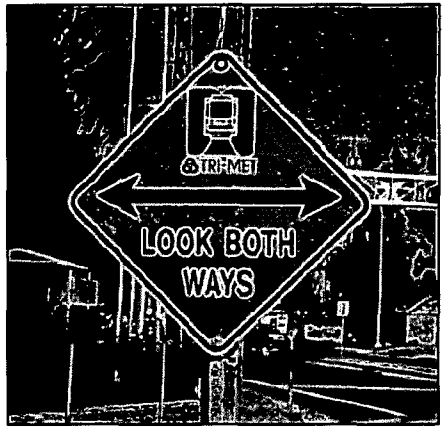
Crossing Type	Benefits	Concerns
	Alternative 6	
At Grade crossing	• At grade crossings are used extensively for both light and heavy rail locations to increase the safety of pedestrians and bicyclists. • Lowest construction cost alternative.	• Although for completeness this alternative has been evaluated in this Feasibility Study, its limitations are many for this location. Such an at-grade crossing could not be installed through the multiple spur tracks of the maintenance yard and it would have to be moved south to where only a crossing of the main lines would be required. • For safety and liability reasons it is strongly opposed by the UPRR and LRT who would not allow such a use within their right-of-way. • During several sight visits, it was observed that long trains are often "parked" on one of the main lines for extended periods making this option likely impossible. • It does not meet the project goals for providing a safe crossing.

Possible Layout for This Project:

A suitable layout of an at-grade crossing for this project was not identified.

Example of a similar Project:





At grade crossings provide cost effective means of increasing the safety for bicyclists and pedestrians. As shown in the photos, the use of signage and barriers to attract the attention of those about to cross the tracks may be all that is required to ensure the user carefully looks before crossing.

However, for this project, there are several major obstacles that preclude an at-grade crossing from being a viable alternative:

- There are too many tracks to be crossed at the ideal location for the crossing (Two LRT tracks, two UPRR main line tracks, and up to five spur tracks.)
- The UPRR often stores long trains on the side tracks that can reach well past (south of) the Sutterville Road Overhead bridge, effectively blocking any at-grade crossing.

Alternatives – Comparison Summary

Alternatives	Crossing Type	Cost	Benefits	Concerns
1A (Preferred Alternative)	CIP Bridge W/ CIP ramps	$4,362,000 Includes: • $200,000 for raising SMUD high voltage lines • $50,000 for secured bicycle parking	• CIP offers the greatest opportunity to meet the tight geometry. • It is likely the most cost effective alternative that fully meets the goals of the project. • Foundation types limit the amount of excavation into the potentially contaminated soil.	• Due to the necessity of maintaining minimum clearances over the access roads, and maintain ADA standards, the ramps will be very long. • Potential impact to rail traffic during construction due to falsework. • Requires costly raise of high voltage SMUD lines.
1B	Precast Girder Bridge W/ CIP ramps	$4,762,000 Includes: • $200,000 for raising SMUD high voltage lines • $50,000 for secured bicycle parking	• Limits disruption to the UPRR and LRT traffic. • Foundation types limit the amount of excavation into the potentially contaminated soil.	• Due to the necessity of maintaining minimum clearances over the access roads, and maintain ADA standards, the ramps will be very long. • Potential impact to rail traffic during construction due to erection of girders and possible temporary falsework bent to splice the long main span girder. • Requires costly raise of high voltage SMUD lines.
1C	Tied Arch Bridge W/ CIP ramps	$6,205,000 Includes: • $200,000 for raising SMUD high voltage lines • $50,000 for secured bicycle parking	• Limits disruption to the UPRR and LRT traffic with nearly a complete span of the UPRR right-of-way. • Foundation types limit the amount of excavation into the potentially contaminated soil.	• Much higher cost than Alternatives 1A and 1B. • Requires tangent deck section for tie, resulting in higher ends, which will require longer ramps. • Due to the necessity of maintaining minimum clearances over the access roads, and maintain ADA standards, the ramps will be longer than for Alt. 1A and 1B. • Potential impact to rail traffic. • Requires costly raise of high voltage SMUD lines.
2	CIP Bridge W/ elevator	$2,400,000 Includes: • $200,000 for raising SMUD high voltage lines • $50,000 for secured bicycle parking	• The smaller footprint of the elevators is an advantage in terms of right of way required. • The elevators will reduce the length, and usually time, required to complete the crossing.	• Maintenance cost of the elevators. • Safety during night hours. • Requires costly raise of high voltage SMUD lines.

Alternatives	Crossing Type	Cost	Benefits	Concerns
3	Tunnel – cut and cover	$1,800,000 May be much higher if jacking precast segments under rails is required Includes: • $50,000 for secured bicycle parking	• Avoids visual impacts associated with the bridge options. • Elevation change (between ground surface and bottom of tunnel) would be less than for the bridge options resulting in shorter approach ramps.	• Will require extensive excavation of contaminated soil. • Construction will have to be phased to provide for rail traffic. • Depressed approaches will require a larger impact on permanent right of way. • Safety of users due to long confined area.
4	Tunnel – rails on bridges	$2,250,000 Includes: • $50,000 for secured bicycle parking	• Avoids visual impacts associated with the bridge options. • Elevation change (between ground surface and bottom of tunnel) would be less than for the bridge options resulting in shorter approach ramps.	• Will require extensive excavation of contaminated soil. • Construction will have to be phased to provide for rail traffic. • Depressed approaches will require a larger impact on permanent right of way. • Safety of users due to long confined area.
5	Widen Sutterville Road UC	$2,200,000 Includes: • widening approach embankments • $50,000 for secured bicycle parking	• This alternative has many merits including likely lower construction costs, less right-of-way issues, additional area for the west approach to accommodate ADA requirements, and avoidance of disruption to the users of the LRT station.	• May not draw many additional users than the current sidewalk across the existing bridge. • Would remain a more circuitous route between the existing and future neighborhoods to the east and the LRT station and center of City College.

Alternatives	Crossing Type	Cost	Benefits	Concerns
6	At Grade crossing	$500,000 assumes two automated gates Includes: • $50,000 for secured bicycle parking	• At grade crossings are used extensively for both light and heavy rail locations to increase the safety of pedestrians and bicyclists. • Lowest construction cost alternative.	• Although for completeness this alternative has been evaluated in this Feasibility Study, its limitations are many for this location. Obviously such an at-grade crossing could not be installed through the multiple spur tracks of the maintenance yard and it would have to be moved south to where only a crossing of the main lines would be required. • For safety and liability reasons it is strongly opposed by the UPRR and LRT who would not allow such a use within their right-of-way. • During several sight visits, it was observed that long trains are often "parked" on one of the main lines for extended periods making this option likely impossible. • It does not meet the project goals for providing a safe crossing.

Costs are estimates of the probable cost of construction. They include:

- Base cost of the construction
- Time Related Overhead of 5%
- Mobilization of 10%
- Contingency of 25%
- Design engineering of 15%
- Construction management of 12%

Preferred Alternative

Alternative 1A, cast-in-place (CIP) bridge with approach ramps has been selected as the preferred alternative. As noted above, the other categories of crossings were not selected due to concerns that could not be adequately mitigated:

- Undercrossing (tunnel type construction under the tracks): Known presence of extensive ground contamination would make this type of construction very expensive due to the large volume of excavated material that would require transport to a special landfill. In addition, there would be the on-going concern of vapors from the contaminants collecting in the tunnel sections and seepage of contaminated groundwater creating a health hazard. Pumping would be required to handle rain and potential ground water, creating the additional concern of disposing contaminated water. Lastly, the enclosed sections would be lengthy; creating the personal safety hazard of a confined area, especially after sunset.
- Overcrossing with elevators: Although the use of elevators may reduce the initial cost of construction, it may become the more costly alternative in the long term due to required continuing operation and maintenance. The use of elevators on such bicycle/pedestrian projects is generally reserved for situations where space is not available for ramps, or where operating and maintenance budget is available.
- Widening the existing Sutterville Road Overhead: This alternative would not meet the project goals of attracting more users as it would be adjacent to the existing route (bridge sidewalk), would not follow the City of Sacramento's Master Bikeway Plan to directly link the heart of City College and the LRT station with neighborhoods to the east, and would retain the current circuitous routes between these destinations leaving the illegal and dangerous trespassing across the tracks as a continued enticing alternative.
- At Grade Crossing: Due to the high volume of UPRR traffic and the LRT traffic, along with long UPRR trains often being parked on one of the main lines or spur tracks, makes this alternative infeasible.

In contrast, the more conventional bridge alternative stood out for meeting all the prime objectives of the crossing project. The cast-in-place (CIP) option of Alternative 1 (Alternative 1A) was selected over the precast girder option (Alternative 1B) due to the length of the main span. Precast girders typically have an upper limit length of about 120'. Beyond this, the girder must be fabricated in shorter sections and then spliced together in the field adding both cost and time. Even so, this would still be a viable option. However, several factors moved the CIP option well ahead:

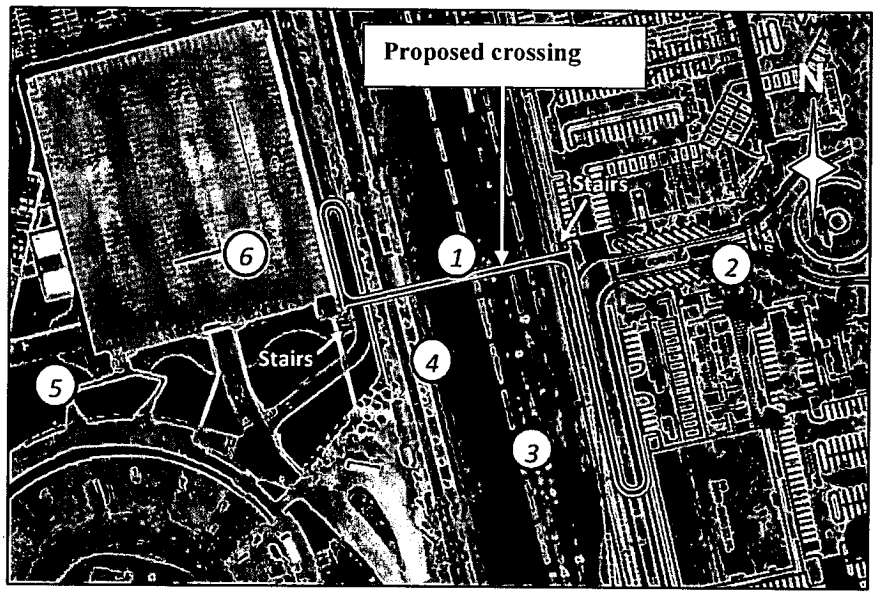
	CIP/PS Box Girder	PC/PS Girders or Continuous Steel Plate Girders
Falsework Requirement	Falsework required. Construction of the superstructure has to accommodate rail traffic at all times.	No falsework required. Placement of girders can be coordinated with periods of light rail traffic.
Transportation Requirement	None	Girder lengths are 140.5' max, and cannot be transported without special permitting. It is likely that shorter lengths would be fabricated and shipped, and field spliced.
Seismic Performance	Excellent.	Special detailing is required for seismic design for continuous structures.
Conflict With Rail Uses	Extensive system of falsework openings required. Considerable construction over LRT station	Falsework eliminated. Deck can be constructed with forms supported by girders. Less impact to station.
Construction Schedule	Substructure must be complete prior to construction of falsework for superstructure.	Since the girders can be fabricated when the substructure is being constructed, the schedule can be expedited.
Construction Cost (Including Mobilization and Contingency)	$180/ft^2 - $220/ft^2, depending upon the substructure system used.	Higher cost than CIP/PS Concrete Box Girder. Ranging from $225/ft^2 - $300/ft^2.

Additional benefits of the CIP option:

- From our stakeholders meeting with the UPRR and subsequent discussions, they indicated that they would not be opposed to temporary falsework, for the CIP option, over their tracks during construction as long as the main line rail traffic was not hindered or impeded.

- CIP construction is generally the most cost effective alternative for most bridges.
- Due to the geometry and location (as negotiated with City College on the west end and developer of the future Curtis Park Village on the east end), of both the east and west approaches, segments of each are not at the maximum ADA slope limit. Therefore, the elevation of the main spans over the tracks can be raised if necessary to provide the vertical clearance through the falsework as required by the UPRR and LRT.

Alignment



Aerial View of Proposed Bridge Crossing Alignment With Overlay of Proposed Curtis Park Village to the Right

1. Proposed Bicycle / Pedestrian Crossing
2. Proposed Curtis Park Village Development
3. UPRR Maintenance Yard and Main Lines
4. Sacramento LRT Station
5. Sacramento City College
6. Parking Garage

Profile

The following are the major considerations in setting the trail/bridge profile:

- Meet ADA ramp slope requirements (5% max constant slope to 8%max with level rest areas at 50 ft intervals).
  - Minimizing the total length of the approach ramps is key to providing a cost effective crossing. As noted above under "Alignment" the location of the ramps was determined as a result of meetings and discussions with the key stakeholders. The resulting plan geometry requires hairpin turns in both approach ramps. The location of the hairpins is dictated by the agreed upon landing location and ADA ramp slope requirements As a result, the second segment, between the hairpin turn and main crossing spans are well below the maximum allowed slope, creating unnecessary length and cost to the project. This has been mitigated to the extent possible by using the second ADA slope requirement of 8% max with the

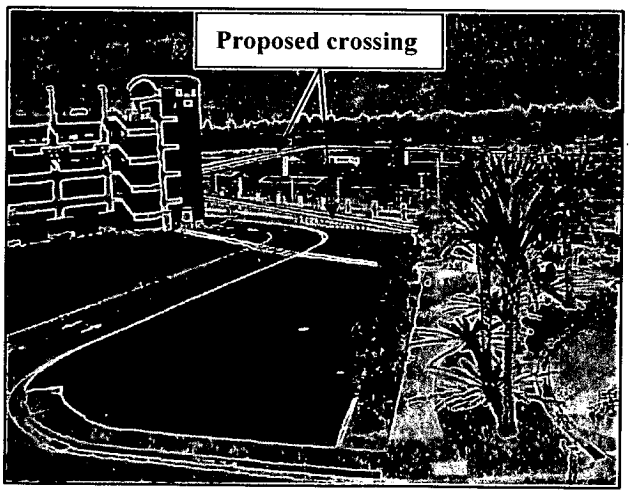


Photo Rendering of Proposed Bridge Crossing Looking North-East from City College

intermittent level rest areas for the first segments. This shortens both the first and second ramp segments for a total reduction in the length of ramps of about 440 feet.

- Maintain minimum vertical clearances of 23 feet over the UPRR tracks, 15 feet over the LRT tracks, and 14.5 feet over adjacent streets to the final completed structure.
  - These minimum vertical clearances may require an increase based on the type of construction. Typically, for precast girder structures, falsework is not required and the minimums may be used. However, for this CIP preferred alternative, falsework will be required. The depth of the falsework must be considered as noted below.
- Provide minimum falsework openings as required by UPRR and LRT during construction
  - The UPRR requirements will control as there will already be access clearance over the LRT lines due to the 8 feet of greater final clearance required by the UPRR over that of the LRT.
  - Minimum falsework clearances are specified in the joint UPRR/BNSF Guidelines. The vertical clearance requirements for UPRR are 21.5feet for temporary construction conditions and 23.5feet for the permanent final bridge structure. The horizontal clearance requirement is 12.0 feet, which will result in a minimum falsework clear span over the dual UPRR mainline tracks of 41 feet. Caltrans Bridge Design Aids (BDA), Table 10-2, Falsework Depth Requirements, suggest a minimum falsework depth of 3'0" for this span length.

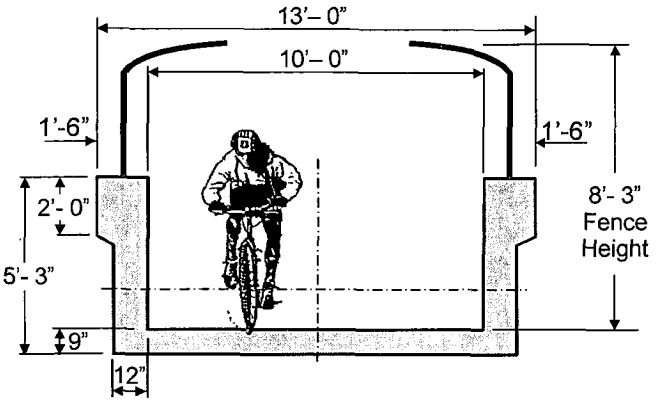
    However, due to the narrow width of this bridge, the main falsework beams may be placed parallel to the face of the bridge girders and smaller depth stringers placed between these girders to form a "tub" section. It is assumed, then, that the overall increase in thickness for the falsework can be limited to the 2 feet difference between the permanent and temporary conditions. Therefore, the resulting final clearance would not have to be increased above the minimum 23.5 feet.

    As noted in the above discussion on ADA slope requirements, the returning ramp sections beyond the hairpin turns are below the maximum ADA slope requirements. To meet the higher elevation of the main spans over the tracks, these ramp sections can be steepened without requiring additional length.
  - In addition, special conditions for falsework construction and protection, as required by the American Railway Engineering and Maintenance-of-Way Association, (AREMA), must be followed.
  - It is assumed that vehicular traffic will not have to be accommodated on the two local streets crossed by this bridge. At the west approach, the parking lot to the north of the parking structure can also be accessed by several other routes. Therefore, it is assumed that this street may be closed during construction. As noted above under "Geometry", a temporary closure will be required regardless, in order to realign the street to accommodate the ramp touchdown.
- Maintain minimum horizontal offsets to UPRR and LRT rails
  - The proposed column locations meet the requirements of the UPRR for a 20 foot clearance from center line of track to face of column. Closer clearances may be allowed if the columns are sized to meet "heavy construction requirements" by providing a cross-sectional area of at least 30 square feet, or if crash walls are provided to protect the columns.
  - Minimum horizontal clearances to components of the bridge structure along the local streets are not required. However, columns and approach landings may be protected by concrete barriers or guard railing.

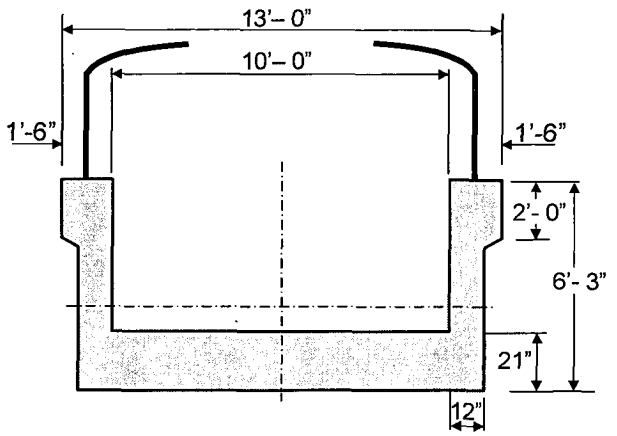
For profile of proposed alternative see Appendix I, Proposed Alternative, 30% Design

Superstructure Type

Following are graphics of the cast in place (CIP) "U" Girder bridge cross sections at key locations Also, see Bridge General Plan, Foundation Plan and Typical Section sheets [See APPENDIX I] for additional details of the proposed alternative:

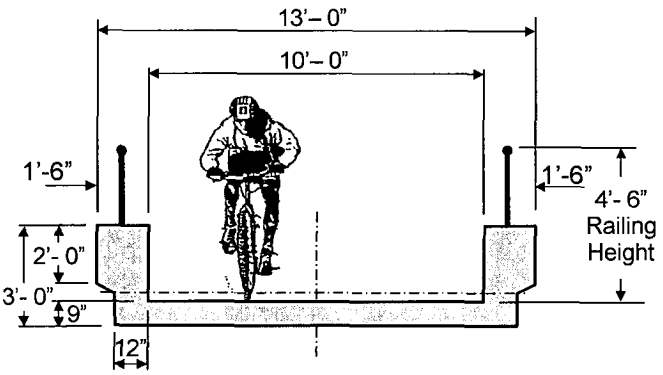


Typical Section

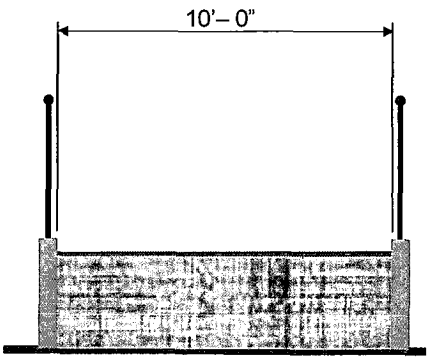


Haunched Section

Superstructure Cross Sections -Main Bridge Crossing, Prestressed Concrete



Superstructure Cross Sections
Approach Ramps, Reinforced Concrete



Approach Embankment Cross Sections
Approach Ramps, Retained Earth

The primary objective in selecting the "U" girder is to lower the peak deck elevation as much as possible. As noted above, it is the deck elevation that drives that length of the ADA compliant approach ramps. Every foot in height of the deck elevation results in as much as 40 feet of additional ramp at each end. However, for the proposed geometry, the upper length of the east ramp is below the ADA slope limit, so some additional height in deck elevation can be accommodated without lengthening the ramp on that end.

The depth and cross section of the superstructure has been refined to meet the following conditions:

- Meet cost effective depth to span ratio for the CIP/PS main crossing spans.
- Meet cost effective depth to span ratio for the CIP/ RC approach spans.
- Provide required height of 8'-10"and type of railing/fencing for the main crossing spans over the railroad tracks as required by joint UPRR/BNSF Guidelines. This is higher than the 4'-4" required for pedestrian and bicyclists.
- Reduce the height of the edge girders above the deck of the approach spans to provide better sight distance

at locations of curves, where open metal railing is then used to achieve the final bike railing height.

- Provide opportunity for cost effective architecture.

Substructure Type

The approaches to the abutments will be embankment fill contained be a pair of retaining walls. A concrete deck will cap the fill to match the adjoining bridge deck. The intent is for the bridge to begin at such a height (8 feet clear to ground) that the area below the bridge is easily visible for security reasons by eliminating hiding places, as well as for reducing the potential for collection of debris. The abutments shall be designed for service loads and seismic active force. The abutment seat-width shall be set to provide adequate room to prevent unseating of the bridge superstructure during a maximum credible earthquake (MCE) event.

The superstructure will be supported on cantilever seat-type abutments and single column bents. The single column bents along the City College parking garage will be "C" bents to provide for realignment of the adjacent roadway. According to the geotechnical engineer, spread footings, driven piles or drilled shafts are feasible. The final design phase shall evaluate each bridge type for the different portions of the bridge. The following shall be considered:

- Structural suitability.
- Volume, cost and safety of removing contaminated soil.
- Adjacent foundations such as the existing City College parking garage and proposed Curtis Park Village (CPV) structures. Foundation plans for these structures could not be obtained for the feasibility study phase, but must be obtained for final design. It is anticipated that the foundations along the proposed CPV structures will have to accommodate several alternative building foundations if the construction of this project precedes it.
- Railroad operations both during construction and for the final in-place foundation.
- Noise to adjacent residents and students during construction.

At the top of the bridge columns, there will be an integral connection with the superstructure. The superstructure bending moment capacity shall be designed to be higher than the column over strength moment in the longitudinal direction to prevent potential plastic hinging in the superstructure. The joint shear design at the superstructure/column interface shall also be taken into consideration. In addition, the column design will conform to all the requirements of latest Caltrans Seismic Design Criteria.

Project Costs

The estimated cost for the overall project is as follows:

Structure Items	$1,975,045
Civil Items	$204,450
Time Related Overhead (5%)	$108,975
Mobilization (10 %)	$254,274
Contingencies (25%)	$635,686
Engineering (15%)	$476,765
CE (12%)	$381,412
Easements and Right of Entry Acquisitions	$75,000
Utility relocation	$200,000
Provide secure bicycle parking	$50,000
Total	**$4,361,607**

For a detailed cost estimate, see Appendix H, "Detailed Estimates of Probable Construction Costs – Backup Data"

Summary– Preferred Alternative

Name	City College Light Rail Station Pedestrian/Bicycle Over Crossing
Structure Type	Main span crossing of UPRR maintenance yard: CIP/PS Concrete Haunched "U" Girder Approaches Ramps: CIP/Reinforced Concrete "U" Girder
Spans	Main span crossing of UPRR maintenance yard: 72'-141'-15', total length = 228' Approaches, Ramps: Spans Vary: 50' to 59', total length of west approach = 271' total length of west approach = 451' Approach, Embankment: 107' each end, total length of both embankments = 214' Total length of crossing = 1,164'
Structure Depth	Main span crossing of UPRR maintenance yard: 5'-3" varies to 6'-3" at haunch deck slab – 9", varies to 21" at haunch Approach Ramps: 3'-0", deck slab - 9" typical
West Abutment	Cantilever seat type abutment founded on spread footing.
East Abutment	Cantilever seat type abutment founded on spread footing.
Bents	Single column bents founded on drilled shafts or driven pile group. "C" column bent founded on driven pile group where required adjacent to existing or future buildings
Construction Sequence	Construction will be performed primarily in two phases: 1. Approach ramps, 2. Main spans crossing tracks. See "Typical Section" sheet in APPENDIX I. 1. Relocate and/or protect utilities. 2. Relocate access road along east side of parking garage. 3. Construct abutment retaining walls and place fill for east approach. 4. Construct abutment retaining walls and place fill for west approach. 5. Construct reinforced concrete ramp on approach fills. 6. Construct both west and east approach ramp foundations. 7. Begin construction of CIP/RC approach ramp structures. 8. Construct main span bridge foundations in UPRR right-of-way / continue completion of approach ramps. 9. Construct CIP/PS main span bridge structure. 10. Install bridge railing along approach ramp edge girders. 11. Install fencing along main span edge girders over UPRR right-of-way. 12. Install lighting and place speed limit and curve warning signs. 13. Open to public traffic.
Vertical Clearance	Will meet or exceed minimum permanent vertical clearance requirements by the BNSF over their tracks (23'4"), LRT tracks (15'-0"), and by the City of Sacramento over local streets (14'-6").
Temporary Vertical Clearance	As required to meet minimum vertical clearance requirements through false work by the BNSF and LRT over their tracks and by the City of Sacramento over local streets.
Barriers	Main spans crossing of UPRR maintenance yard: Edge girders of "U" section to height required for bicycle railing. Approaches: Lower edge girders to facilitate site distance w/ metal railing to meet height

	required for bicycle railing.
Deck Protection	The proposed structure is located in Environmental Area No. 1. No special deck protection is required.
Drains	Deck drains may be required.
Temperature Range	20°F to 110°F
Joints	Joint Seal (MR=1/2")
Utilities	Utility conduits will be embedded in the barrier for bridge lighting only. Due to the long ramps with hair-pin turns, accommodation for other major utilities (waterline, gas line etc) is not feasible.
Future Widening	N/A
Seismic Analysis	For this Feasibility Study, a static analysis was performed for the express purpose of developing realistic foundation sizes for cost. A full seismic analysis will be performed in final design according to Caltrans Seismic Design Criteria (SDC June 2006- Version 1.4, or latest version) and response spectra to be provided in the final Foundation Report.

References:

A. Survey –
   - Topographical Survey

B. Geotechnical –
   - Preliminary Geotechnical/Geology Memorandum
   - Initial Site Assessment (ISA)

C. Environmental –
   - Administrative Draft Initial Study/Mitigated Negative Declaration (IS/MND)
   - Technical Studies –
     - Biological Resources:
       Natural Environment Study, Minimal Impact (MINES)
     - Cultural Resources Report:
       Historic Property Survey Report & Archaeological Survey Report (HPSR/ASR)
     - Visual Impact Assessment Memo (VIA)

D. Public Outreach –
   - Project website: www.cityofsacramento.org/transportation/engineering/sccbikeped

Appendices:

A. Public Outreach information

B. Letters of Support

C. Utility Table & Letters

D. Environmental Issues

E. Hazardous Materials/Waste

F. Geotechnical Issues

G. Design Guidelines

H. Estimates of Probable Construction Costs – Backup Data

I. Proposed Alternative, 30% Design plan sheets:

- General Plan
- Foundation Plan
- Typical Section

Appendix A
Public Outreach information

Overview

In 2007, the city of Sacramento Department of Transportation initiated a feasibility study to examine possible pedestrian and bicycle crossing options between Sacramento City College Light Rail Station and the Curtis Park neighborhoods. The study examined possible alternatives, cost and environmental ramifications for the crossing. It is also an important component of the city's sustainability goals of encouraging pedestrian and bicycle trips, promoting the use of transit and reducing dependence on private automobiles.

In addition to providing a more direct link between the neighborhood to the east and the light rail station to the west, the proposed crossing would also provide safe and convenient access over several lines of rail road and light rail tracks. Currently, pedestrians and bicyclists must use the multi-lane, high-speed Sutterville Road to reach a destination located east or west of the rail lines.

Understanding the importance of community outreach and stakeholder involvement, the city conducted a comprehensive public outreach program. The two-phase approach involved initial stakeholder meetings to assist in developing a preferred alternative and obtaining input about community outreach. The second phase, implementation, involved reaching out to stakeholders and the community around the project area to inform them about the project and preferred alternative. Phase two activities included distribution of fact sheets, newsletters, postcards, e-communications, an interactive Web site and presentations to stakeholder groups as outlined in the following report.

The project team considered the suggestions and input from all stakeholders and incorporated them as much as possible into the preferred alternative.

Public Outreach Goal

The public outreach goal was to proactively inform the public and stakeholders about the Sacramento City College Light Rail Pedestrian/Bicycle Crossing Project's purpose, benefits, design and potential impacts. The goal focused on building support among those in the community with a desire to see alternate transportation grow through proactive and informed public outreach. Resident and business concerns were addressed and input was solicited regarding various alternatives.

Outreach Objectives

Key objectives of the public outreach program were developed after initial research was conducted.
The objectives included:

- Communicate project status and progress clearly and consistently with the community and stakeholders.
- Assist the project team in soliciting community and stakeholder input and feedback about project elements and design alternatives.

Through inclusive stakeholder and community outreach, the city of Sacramento Department of Transportation staff, with assistance from the consulting firm LucyCo Communications, accomplished the outreach objectives.

Public Outreach Plan & Ongoing Project Communication

Following initial small group meetings with key stakeholders, an outreach goal was identified and a proactive program approach was developed to help the city reach stakeholders, businesses and residents in a clear, effective and memorable manner.

Throughout the duration of the project, the city and consultant team members communicated to ensure activities were cohesively progressing and that outreach and engineering tasks moved at the same pace.

Database

The goal of the database was to identify interested parties in the project area such as developers, the local college district, regional transit organizations, as well as other stakeholders with a vested interested such as

walking, bicycling and other similar groups. The database was used for project update communications, gathering concerns and soliciting letters of support. It also served as a component of the distribution list used for mailed outreach pieces.

The customized stakeholder database of nearly 100 included:

- Community college district representatives
- Developers
- Neighborhood association leaders
- Project team members
- Regional private and public transit organizations
- Media contacts
- Public utilities commissioners
- Other relevant government agencies
- Community members who submitted contact information via the project Web site

Additionally, a parcel mailing list was purchased and used to reach a broader audience that included all 5,500 homes, businesses and apartments in the project area. The parcel mailing list was used to send outreach materials (postcard and newsletter), ensuring that all area residents and businesses were informed of the study.

Stakeholder Meetings

The purpose of the stakeholders meetings was to share project information and obtain stakeholders' input about their concerns and ideas and to answer questions. The meetings also helped identify key information that may be useful in later phases of the project.

The stakeholder meetings provided a forum for city staff and the project team to meet face-to-face with stakeholders and community members to hear input and suggestions. Initial key stakeholder meetings were held with Los Rios Community College District representatives, Petrovich Development Company, Union Pacific Rail Road, and Regional Transit employees early in the study to determine levels of support and identify opportunities and challenges. The information obtained from the stakeholder meetings was used to identify the preferred alignment.
Through the stakeholder meetings, the city and project team were able to develop a preferred alignment that met the needs of the property owners, which included:

- Union Pacific Railroad (UPRR)
- Sacramento Regional Transit Authority (LRT)
- Los Rios Community College District - Sacramento City College campus
- Petrovich Development - developers of Curtis Park Village
- City of Sacramento – in regards to Sutterville Rd. Overcrossing Widening alternative

Association/Organization Meetings

Following the key stakeholder meetings, local neighborhood and community associations were contacted to share project information and request the opportunity to present the preferred alignment to their members.

On many occasions contact was made to present the project to the following groups:

- College Plaza Neighborhood Association
- Curtis Park Neighborhood Association
- Land Park Community Association
- Sacramento Area Bicycle Advocates
- Sacramento City/County Bicycle Advisory Committee (SAC BAC)
- Sierra Curtis Neighborhood Association
- WALKSacramento

The city and project team met with the following:

- January 29, 2009 – Sierra Curtis Neighborhood Association

- February 10, 2009 – Sacramento City/County Bicycle Advisory Committee (SAC BAC)
- March 23, 2009 – Sacramento Area Bicycle Advocates (SABA) and WALKSacramento

While the project was conceptually supported by a large number of community and association meeting attendees, many had differing opinions about the aesthetic and usability features of the proposed bridge. The feedback received most often related to safety and esthetic features, including the need for stairs and a ramp, and ensuring the ramp would be wide enough for bicyclist passing in either direction. Attendees also requested that the on and off ramps include flat landings located at each switchback. Safety was a major point of interest and included requests for effective lighting and side walls that allowed for users to be seen (i.e. not solid).

Information collected during the neighborhood and organization meetings, including questions and answers, was summarized in meeting recaps, posted to the project Web page and attendees were added to the stakeholder database.

Media Relations

A media release was developed and disseminated to local media outlets announcing study details and opportunities for public input, including the Web site and meeting dates. The following media outlets were sent the media release:

- The Land Park News, both print and electronic versions
- Land Park Community Association newsletter
- Sierra Curtis Neighborhood Association newsletter
- South Land Park Neighborhood Association newsletter
- YourStreet.com – regional Web site that features Land Park news

Outreach Materials

A consistent graphical identity was developed to help distinguish print and electronic project outreach materials. The project logo is located at right.

The project team developed a postcard, newsletter, e-newsletter and email blasts. All materials were designed to share up-to-date information about the project and provide information about opportunities to providing input. Specific content about city's sustainability goals and dedication to alternative transportation, background information, project schedule, contact information and the project's Web address was also included.

Additionally, a project fact sheet and full-color presentation boards were produced to assist stakeholder and community members identify the proposed project area and project details during stakeholder meetings.

Outreach Materials

Date	Outreach Material	Purpose	Distribution
January 2009	Postcard	Promoted the project Web site and Sierra Curtis Neighborhood Association meeting.	1,450 residents, businesses and stakeholders
April 2009	Newsletter	Updated residents, businesses and stakeholders about the proposed alignment, project funding, crossing renderings and promoted the project Web site.	5,600 residents, businesses and stakeholders
April 2009	E-newsletter	Highlighted the project's feasibility and environmental study, proposed alignment, vidcast and interactive project map.	100 residents businesses and stakeholders

Project Duration	Fact Sheet	Highlighted keep project components and the project Web site.	Distributed at stakeholder meetings and posted to the project Web site

Web Site
The city of Sacramento Web site contains information about each of its active projects, including the Sacramento City College Light Rail Pedestrian/Bicycle Crossing project. The project team developed user-friendly and interactive Web pages that were hosted on the city's site. The project Web pages became a central feature of the outreach program as it was continuously updated with the timeliest information, allowing visitors access to all project details.

The Web pages were continuously updated throughout the project and included:

- Meeting Recaps & Project Images – All meeting recaps, project renderings, and location and alignment maps were posted to the Web site.
- Frequently Asked Questions – Many questions were submitted to the city's project manager and project team; all questions were answered and when applicable added to the frequently asked questions section of the Web pages. Additionally, following stakeholder meetings, the frequently asked questions page was updated to reflect questions asked during the meeting.

In an effort to reach stakeholders and residents who do not rely on traditional media, the following multimedia materials were developed:

- Interactive Project Map – An interactive location map was developed using scroll over and pop-up features to provide additional project details and engage users.
- Vidcast – The city and project team filmed and produced a 90-second project overview video that included footage of the project area and proposed alternative crossing details. Three city of Sacramento Department of Transportation team members were included in the video. Upon completion, the video was edits and posted to the project Web pages.

Result of Public Outreach

The impact of the public outreach on the results of this study is important to note. The main stakeholder groups provided key input as to their requirements regarding impact to their existing facilities and operations. In particular, the location and configuration of the proposed alternative is a direct result of meeting each of these stakeholders' requirements while still maintaining the objectives of the project.
To compliment the impact of the stakeholders, the community groups provided a clearer understanding of the user's needs and desires from usability of the crossing, to aesthetics from the perspective of one crossing the bridge as well as from those viewing it from a distance, to incorporating the entrances into the existing and proposed surrounding facilities.

Appendix B
Letters of Support

SABA
Making Sacramento a cycling capital

909 12th Street Ste 114 Sacramento, CA 95814 (916) 444-6600 www.sacbike.org

2009 MAR 31 PM 3 01
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DOT
ENGINEERING SVCS DIV

Advisory Board

Jane Hagedorn
CEO
Breathe California of Sacramento-Emigrant Trails

Dr. Eric Heiden
Orthopaedic Surgeon
Sports Medicine UC Davis

Wendy Hoyt
President
The Hoyt Company

Matt Kuzins
President
Matt Kuzins & Kumpany

Michele McCormick
Principal
MMC Communications

James Moose
Partner
Remy, Thomas, Moose and Manley, LLP

Craig Stradley
Principal
Mogavero Notestine Associates

Jim Streng
Partner
Streng Brothers Rentals

March 30, 2009

Ryan Moore
Department of Transportation
City of Sacramento
915 I Street, Room 2000
Sacramento, CA 95814

RE: Sacramento City College Light Rail Pedestrian/Bicycle Crossing Project

Dear Mr. Moore:

Thank you for meeting with the DDRC on Monday, March 23, to discuss the subject project. SABA fully supports the construction of a crossing between the Sacramento City College Light-Rail Station and Curtis Park for use of bicyclists and pedestrians. SABA still has concerns about the convenience and cost-effectiveness of the proposed design for a crossing.

We hereby request the following considerations as you go forward with the planning and design of the project:

- Because the primary objective of the project is for users to efficiently access the light-rail station at Sacramento City College, both the pedestrian stairs and the crossing ramp should deliver users as directly as possible to the light-rail station platform.
- The width of the travel surface on the crossing should be at least 12' to ensure comfortable use by two-way traffic of both pedestrians and bicyclists (see Caltrans Highway Design Manual Chapter 1000 Topic 1003 – Design Criteria for horizontal clearance to vertical obstruction at www.dot.ca.gov/hq/oppd/hdm/pdf/chp1000.pdf).
- The radii of the turns on the ramps between the crossing span and the ground level must be large enough for safe and comfortable bicycle use.
- The crossing-span structure should be visually porous (i.e. not solid concrete) to allow views of approaching users at turns in the ramps, to allow views of users and activities on the crossing from other viewpoints, and to allow views of the tracks and crossing vicinity below.
- The entire project of crossing span and ramps should, by their appearance and placement, welcome and encourage use. It should be visually appealing and attractive to viewers from surrounding areas.
- The pedestrian stairs and the ramp on the eastside of the crossing should be integrated with the retail block in the Curtis Park Village project.

American Lung Association Clean Air Award, Sacramento Environmental Commission Environmental Recognition Award, League of Women Voters Civic Contribution Award, League of American Bicyclists Club of the Year

Appendix C
Utility Table & Letters

Utility Description	Location	Utility Owner	Relocation – for:		Comments
			Bridges	Tunnels	
Storm Drain Inlets	At Grade: Multiple locations within & near LRT station	City of Sacramento	No	Protect in place	Drainage structures (pipes) leading from inlets require further identification.
Storm Drain inlets	At Grade: Gutter drain east edge of access road along east side of garage	**City of Sacramento**	**Relocate**	Protect in place	Drainage structures (pipes) leading from inlets require further identification.
Storm Drain inlet	Buried: East edge of UPRR right-of-way	City of Sacramento	No	Protect in place	For bridge option, do not obstruct flow path to inlet.
Water/ fire hydrant	Buried: Parallel to tracks, just west of UPRR	**City of Sacramento**	**Yes.**	Protect in place	Relocate fire hydrant located within limits of proposed ramp approach fill.
Irrigation System	Buried: Landscaped areas adjacent to parking garage	**Sacramento City College**	**Yes.**	Yes	Required for bridge option, relocation of access road east side of garage & tunnel option for portal.
Sewers	NA	County of Sacramento	NA	NA	The County responded that they have no facilities in the project area.
Gas	Buried: Parallel to tracks, near west edge of UPRR. Terminates south of LRT station w/ spur to stadium.	Pacific Gas & Electric (PGE)	No.	No.	Per map provided by PG&E, nearest line terminates to the south of the proposed crossing
Power	Aerial cables: Along east edge of LRT.	**Sacramento Municipal Utility District** (SMUD)	**Yes.** Lines will have to be raised.	No	Lines will have to be raised to provide minimum clearance above bridge deck. This is a high dollar item. See discussion in utility section of report.
Station Lighting	Posts: Along west edge, and within station	**Regional Transit**	**Protect in place**	Anticipate protect in place	May require temporary remove and replace for tunnel option.
Power Junction Box	At Grade: North end of LRT station within UPRR.	Regional Transit	No	No	Must confirm location and direction of underground conduits leading to box.
Catenary power cables	Aerial cables: Parallel to the LRT tracks, east side of each track @ station, single centered poles beyond	**Regional Transit**	**Protect in place / Reset** To be determined based on final soffit height	No	Cables will run below a bridge soffit and may have to be lowered and attached to bridge

Utility Description	Location	Utility Owner	Relocation – for:		Comments
			Bridges	Tunnels	
Commun-ications	Buried: Parallel to, and between, the two LRT tracks	Regional Transit	No	Protect in place	Utilities are likely shallow enough to run above tunnel options.
Cable	To be Confirmed	Comcast	Not anticipated	Anticipate protecting in place.	
Fiber Optic	Aerial cables: along east edge of UPRR on SMUD poles	**SureWest** TeleVideo	**Yes.**	No	Will be relocated to either below the bridge soffit or to a suitable height above the bridge deck based on final bridge height
Fiber Optic	Buried: parallel to the tracks, about 50ft east of the RR right-of-way.	Verizon	Not anticipated	Anticipate protecting in place.	Appears to be carried by an MCI facility
Fiber Optic	To be Confirmed	Level 3 Commun-ications	Not anticipated	Anticipate protecting in place.	
Fiber Optic	To be Confirmed	MCI Worldcom	Not anticipated	Anticipate protecting in place.	
Fiber Optic	NA	AT&T	NA	NA	AT&T responded that they have no facilities in the project area.
Fiber Optic	To be Confirmed	Sprint	Not anticipated	Anticipate protecting in place.	
Fiber Optic	Not known	TelePacific Communi-cations	No Conflict	No Conflict	TPAC responded that there will be no conflicts, but did not provide location.
Fiber Optic	NA	Kinder Morgan	NA	NA	Kinder Morgan responded that they have no facilities in the project area.

Utility Letter Responses:

- SureWest
- Sacramento County Sanitation District
- Qwest
- TelePacific Communications (TPAC)
- Pacific, Gas & Electric (PG&E)
- Kinder Morgan
- Verizon
- Sacramento Regional Transit District
- Sacramento Municipal Utility District (SMUD)
- AT&T

See the following pages for copies of the responses.

Utility Letter – SureWest, 1 of 2:

SureWest®

CITY OF SACRAMENTO
DOT
ENGINEERING SVCS DIV

April 15, 2009

Ryan Moore
City of Sacramento
915 I Street Room 2000
Sacramento CA. 95814-2604

RE: City College Pedestrian Overcrossing

Ryan,

We have reviewed your Utility letter A for the above-mentioned project and have determined that we have fiber attached to the utility poles as identified on the attachment. We see no conflict with what is being proposed. This however does not release you from calling in a USA request prior to start of construction.

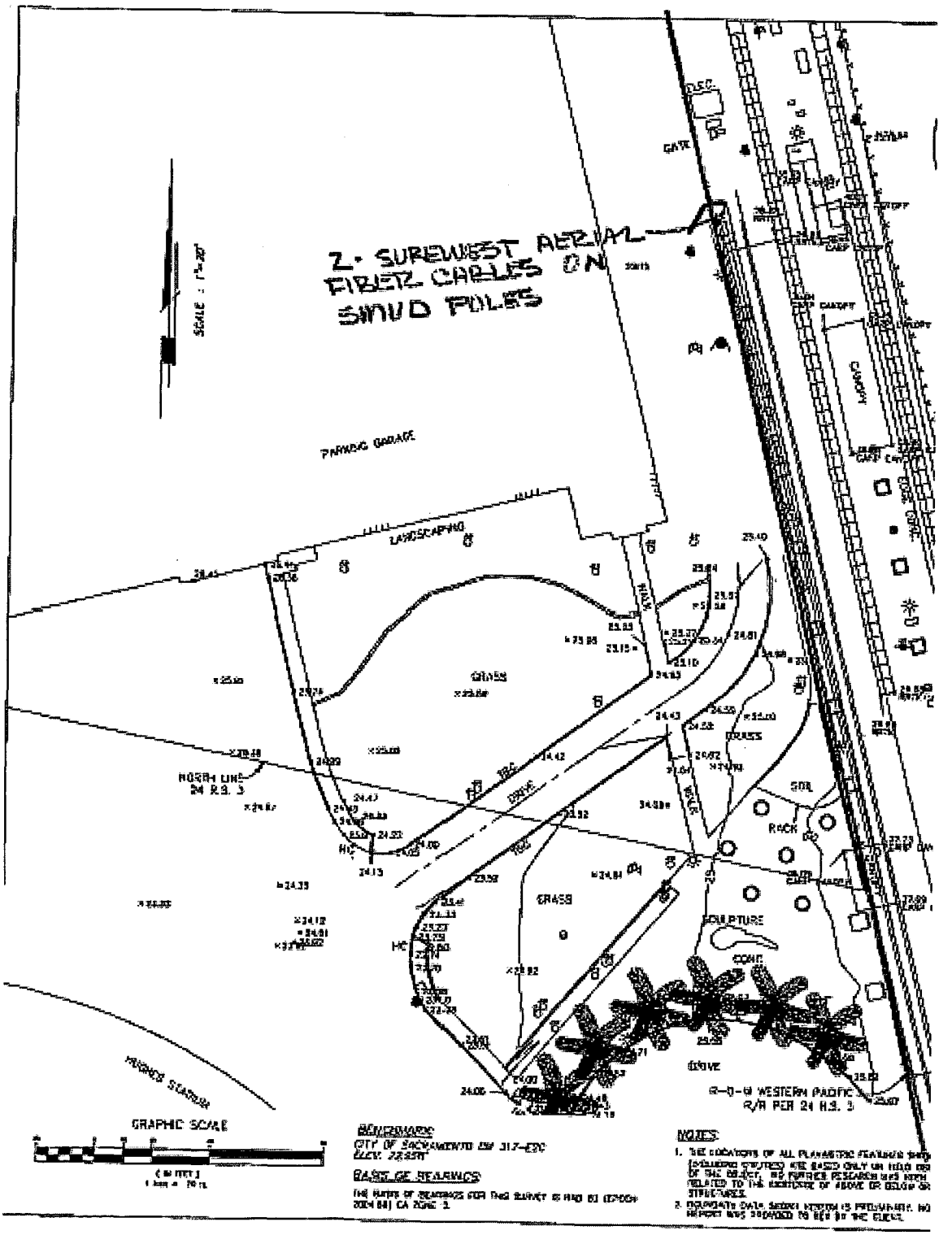
Please call if you have any questions.

Respectfully,

Gretchen Hildebrand
SureWest Communications
Right of Way
916.786.1513

SureWest Communications
8150 Industrial Ave. Building B
Roseville CA. 95678

Utility Letter – SureWest, 2 of 2:



Utility Letter – Sacramento County Sanitation District:

CSD-1
COUNTY SANITATION DISTRICT 1

2009 MAR 20 AM 8 35
RECEIVED
CITY OF SACRAMENTO
ENGINEERING DIV

LETTER OF TRANSMITTAL

TO: **City of Sacramento**

DATE: March 13, 2009

ATTENTION: Ryan Moore
PROJECT: Sacramento City College area
REFERENCE #: Letter "A"

WE ARE SENDING YOU: ☒ ENCLOSED ☐ UNDER SEPARATE COVER VIA

The following items:

Copies	Description

THESE ARE TRANSMITTED as checked below:

☐ For Approval
☐ For Your Use
☐ As Requested
☐ For Review and Comment
☐ Please respond by:

☐ Approved as submitted
☐ Approved as noted
☐ Returned for corrections
☐ copies retained for our files

☐ Reviewed no additional comments
☐ Reviewed see additional comments
☐ Return 2 corrected prints
☐ Sign and return copies

REMARKS: **There is no SASD (Sewer) facility within this project area.**

SIGNED: **Ray Vassell**
Principal. Engr. Tech

Sacramento Area Sewer District
Collection Systems Division
10545 Armstrong Avenue, Suite 101
Mather, CA 95655
876-6140

cc:

Utility Letter – Qwest:

NNS Field Office
1035 Enterprise Way, Suite 100
Roseville, CA 95678

2009 MAR 11 PM 1 23

RECEIVED
CITY OF SACRAMENTO
DOT
ENGINEERING SVCS DIV

Qwest.
Spirit of Service®

March 10, 2009

Inves # N/A

Ryan Moore
City of Sacramento
Department of Transportation
Engineering Services Division
915 I Street, Room 2000
Sacramento, CA 95814-2604

Re: Sacramento City College Pedestrian Overcrossing Project - Utility Letter "A"

Dear Mr. Moore:

I have reviewed your project prints for the above mentioned request. Qwest Communications does not own, or have plans to install, any facilities within your project location.

If you need further assistance, please do not hesitate to contact me.

Sincerely,

Brett Hankins
Lead Technical Project Manager
(916) 788-1041
brett.hankins@qwest.com

Utility Letter – TelePacific Communications (TPAC):

03/24/2009 05:08 9256865993 STAR DANCE PAGE 02

DEPARTMENT OF TRANSPORTATION

ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

915 I STREET, ROOM 2000
SACRAMENTO, CA
95814-2604

PH. (916) 808-8300
FAX (916) 808-8291

March 5, 2009

NOT conflicting WITH TPAC COMMS

Mr. Curt Heley-Manager
Outside Plant Engineering
ICG c/o TelePacific Communications
190 Park Center Plaza, Suite 100
San Jose, CA 95113

Utility Letter "A"

Dear Mr. Curt Heley,

For your information, enclosed are two sets of preliminary prints showing the improvements to be constructed as part of the Sacramento City College Pedestrian Overcrossing project

On one of the copies of the enclosed plans, please verify the location, size and depth, if underground, of any of your Company's existing facilities that may be affected by the proposed work. Please indicate any pending new facilities that are expected to be installed within the next year. Also, please advise if you maintain an easement for your facilities and provide documentation to that effect.

Within 15 days of receiving this letter, please return the marked up copy to this office.

Thank you for your prompt assistance in this matter. If you desire further information concerning the proposed work, please call me at 808-8279.

Sincerely,

Ryan Moore
Project Manager

RM/wp

PN: T15085700/TK81

Enclosure

Utility Letter – Pacific, Gas & Electric (PG&E):

PG&E File # 09-062 Plat # 2586-C5 TBM #

Date Customer Plans Received 3-10-09 2009 MAR 20 PM 2 07

RECEIVED CITY OF SACRAMENTO ENGINEERING SERVICES DIV

NOTE: Please incorporate the gas and/or electric facilities from the attached plus maps into your plans. Check your plans for conflicts. It is the responsibility of the agency or developer to pothole existing facilities if needed to determine if there are any conflicts. An Application for Gas Service is required and you must allow 6 to 8 weeks to remedy any conflicts. If any pipe coating is damaged during excavation, please contact Gas Maintenance & Operations in your County and we will send someone to repair the damaged pipe wrap.

Sacramento County	(916) 386-5153
Solano County	(707) 440-5759
Yolo County	(530) 661-5157

____ NOTE: No gas facilities within your project site.

X NOTE: No PG&E electric facilities within your project site.

✓ If you have any questions regarding conflicts with our existing facilities or regarding new service to your project, you can contact me at

Name	Address	Phone
Larry Schlight	5555 Florin-Perkins Rd. Sacramento 95826	916-386-5371

✓ If you have any mapping questions you can contact

Pete Miskovich	5555 Florin-Perkins Rd. Sacramento 95826	916-386-5429

____ It appears that highlighted gas facilities located within your project may require special construction equipment weight limits when working over or near these facilities. Please contact our office to review these equipment weight restrictions.

____ PG&E has overhead electric transmission facilities, which are covered by easements within the project boundaries. Land use is restricted within the easements. Please contact our Land Department at (530) 889-3162 and provide a complete set of plans so we may consider a consent agreement.

Utility Letter – Kinder Morgan:

KINDER MORGAN
ENERGY PARTNERS, L.P.
SFPP, L.P.

SFPP, L.P.
Operating Partnership

2009 MAY 12 PM 4 14
RECEIVED
CITY OF SACRAMENTO
DOT
ENGINEERING DIV

May 6, 2009

ENG 4-2-1 (930)
Reference #09-248

Ryan Moore
Project Manager
City of Sacramento
Room 2000
915 I Street
Sacramento CA 95814-2604

Re: Sacramento City College pedestrian overcrossing project

Dear Mr. Moore:

This letter is in response to your letter dated March 5, 2009, concerning the above referenced project.

Based on the information you have provided, Kinder Morgan has no facilities within the project area and therefore has no conflict with the proposed project.

In the event the project scope changes, please resubmit your request.

Sincerely,

A. Dianne Sidorewicz CPS
Administrator
Engineering

T: Quinn/letters/421(930)/09-248

1100 Town & Country Road Orange, California 92868 714/560-4400 714/560-4601 Fax

Utility Letter – Verizon, 1 of 2:

verizon

2009 MAR 24 AM 8 22

RECEIVED
CITY OF SACRAMENTO
DOT
ENGINEERING SVCS DIV

OSP National Support / Investigations
Dept 42864 Loc 107
1600 North Glenville
Richardson, TX 75082

Verizon Business, Network Services.

03/18/2009

CITY OF SACRAMENTO
Ryan Moore
915 "I" Street, Room 2000
Sacramento, CA 95814-2604

RE: PN: T15065700/TK81
- **PEDESTRIAN OVERCROSSING PROJECT –**
- **SACRAMENTO CITY COLLEGE LIGHT RAIL –**
  Sacramento, Sacramento, California

Verizon Business ID: 1461-2009

Dear Sir or Madam:

Verizon Business has been notified by your office regarding the above referenced project.
For your records, in reviewing the design prints received from your office, it has been determined that Verizon Business does have facilities within your construction area and a conflict may exist. In order to avoid this potential conflict, it will be nesessary for your construction to maintain a minimum of twenty-four (24) inches vertical clearance when crossing Verizon Business facilities and sixty (60) inches horizontal clearance when your running line is parallel to our facilities.
The as-built drawings for this area are enclosed and are for information purposes only. **You must contact your local One Call System number at least 48 hours prior to any construction.** During construction it will necessary for us to monitor our facilities.

You should address future correspondence concerning the project to the attention of **OSP National Support/Investigations** at the above address. Please include the above **Verizon Business ID number.**

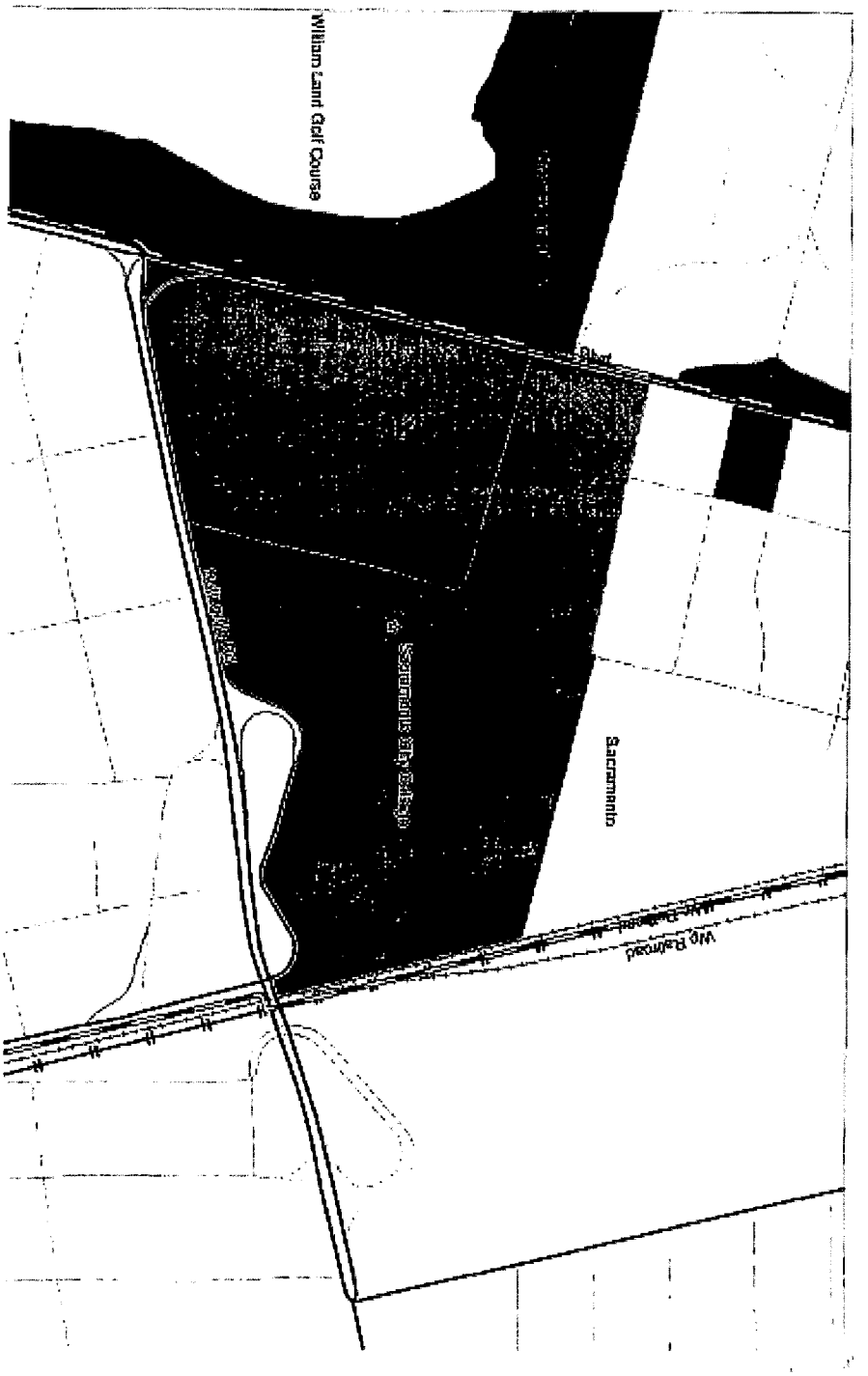
If you need further assistance with this project, please do not hesitate to **call our field representative Rebecca Daniels at 925-951-2711.**

Sincerely,

John Bachelder
OSP National Support / Investigations
(972) 729-6016

24x60 Clearance-asbuilts.doc

Utility Letter – Verizon, 2 of 2:



Utility Letter – Sacramento Regional Transit District, 1 of 2:

Regional Transit

Sacramento Regional Transit District
A Public Transit Agency and Equal Opportunity Employer

Mailing Address:
P.O. Box 2110
Sacramento, CA 95812-2110

Administrative Office:
1400 29th Street
Sacramento, CA 95816
(916) 321-2800

Light Rail Office:
2700 Academy Way
Sacramento, CA 95815
(916) 648-3400

Public Transit Since 1973

www.sacrt.com

2009 APR 8 AM 8 36

April 2, 2009

Ryan Moore
Project Manager
Department of Transportation
City of Sacramento
915 I Street, Suite 2000
Sacramento, CA 95814

Subject: Utility Letter "A" – Sacramento City College Pedestrian Overcrossing Project (PN: T15065700/TK8)

Dear Mr. Moore:

The following information is in response to your letter dated March 5, 2009:

- Regional Transit (RT) does have underground utilities within your project area. For your reference, we are enclosing as-built plans for South Sacramento Corridor Project 1's Light Rail and Station areas. The areas included in these plans are: civil, signal, Overhead Contact System (OCS), traction power, utility, electrical, architectural, and irrigation. Please note that these as-built plans are still under review by our engineers.

  We are also enclosing RT ROW information for the area. Please note that the bus driveway was modified by a subsequent project by LRCCD for which RT does not have final plans. Please contact Glenn Kaneyuki of LRCCD Facilities Maintenance at (916) 856-3419 or kaneyukig@losrios.edu concerning these final plans.

- The tracks and station must remain active during construction. Light rail service cannot be impacted and pedestrian access to and through the station must remain unobstructed. Therefore, RT needs to review final plans to confirm that the light rail operations will not be impacted.

- The contractor must obtain a Track Warrant through RT Metro when working near RT light rail tracks. Please contact Sharon Fultz in RT's Real Estate Department at (916) 556-0308 for details.

Utility Letter – Sacramento Regional Transit District, 2 of 2:

Ryan Moore 2 April 2, 2009

- The contractor will need to obtain a Red Tag to turn off RT's traction power when erecting scaffolding (or falsework) over the OCS, and will be required to protect the OCS. The fee for the Red Tag is $700. Red Tags allow for construction only during light rail non-revenue hours, and require 7 days notice to RT.

- Because, it is anticipated that the pedestrian bridge will be constructed within the light rail station area, RT must ensure that the pedestrian access to and from the station is well designed. Therefore, please contact David Solomon at (916) 557-4682 to discuss the final design.

- RT has bus routes within your construction project area. Therefore, RT would like to attend the pre-construction meeting to address bus service that may be disrupted during the course of construction. Please coordinate directly with Robert Hendrix at (916) 649-2759 concerning this matter.

Please call me at (916) 321-5340 if you have any questions.

Sincerely,

Desi Lopez
Senior Engineering Technician
Engineering and Construction Division

c: Darryl Abansado, Director of Civil & Track Design
Robert Hendrix, Facilities Supervisor
David Solomon, Senior Architect

Utility Letter – Sacramento Municipal Utility District (SMUD), 1 of 3:

SMUD
SACRAMENTO MUNICIPAL UTILITY DISTRICT
The Power To Do More.®

P.O. Box 15830, Sacramento, CA 95852-1830; 1-888-742-SMUD (7683)

2009 APR 2 PM 1 43

March 31, 2009

CITY OF SACRAMENTO – DEPARTMENT OF TRANSPORTATION
ATTN: RYAN MOORE
915 I STREET, ROOM 2000
SACRAMENTO, CA 95814

SUBJECT: "A" PLANS – SACRAMENTO CITY COLLEGE PEDESTRIAN OVERCROSSING PROJECT

*****PLEASE REFERENCE SMUD FILE # 2009019, AND/OR SMUD NOTIFICATION # 30333537, WITH ALL CORRESPONDENCE *****

Attached are prints of the SMUD Geographical Information System (GIS) Map Drawings. The GIS Map Drawing is a guide showing the approximate location of SMUD facilities. SMUD accepts no responsibility for its complete accuracy or for recent changes. Measurements and scale are approximate. Actual depth is unknown. If conflicts with District facilities do exist, the typical schedule for relocation or removal is as follows:

Time needed to prepare and schedule work estimate after receipt of "B" plans:	60	days
Time needed to complete work after receipt of "C" plans:	60	days
Total time needed for SMUD to relocate facilities:	120	days

Please call me if you have any further comments or questions.

Sincerely,

4/1/09

Rod Baer
Engineering Designer IV
Distribution Services
(916) 732-7035

FILE #: 2009019
SMUD Notification #: 30333537

NEW SERVICES • 1708 59th Street, Sacramento, CA 95819-4628; (916) 732-5700

Utility Letter – Sacramento Municipal Utility District (SMUD), 2 of 3:

SMUD
SACRAMENTO MUNICIPAL UTILITY DISTRICT
The Power To Do More.®

P.O. Box 15830, Sacramento, CA 95852-1830; 1-888-742-SMUD (7683)

Apil 3, 2009

Ryan Moore
Engineering Services – DOT
City of Sacramento
915 I Street – Room 2000
Sacramento, CA 95814-2604

Dear Ryan,

Thank you for contacting the Sacramento Municipal Utilities District (SMUD) with your planned project called the Sacramento City College Pedestrian Overcrossing Project. SMUD has reviewed the scope of work that you sent for this project and we have found that there will be a conflict with an Overhead Electric Transmission Line that SMUD has located in that area.

Please send a detailed set of construction plans; being sure to include any plans for grading, digging vegetation, or building/structure/fencing plans. SMUD will review the detailed set of plans that you send and will contact you if any further action is necessary. Thank you for notifying SMUD of your planned project and we look forward to working with you in the future.

Sincerely,

Rachel V. Del Rio

Rachel V. Del Rio
Land Agent
SMUD - Real Estate Services
PO Box 15830 – MS B304
Sacramento, CA 95852-1830

R DEL RIO @ SMUD. ORG

DISTRICT HEADQUARTERS • *6201 S Street, Sacramento CA 95817-1899*

Utility Letter – Sacramento Municipal Utility District (SMUD), 3 of 3:

Email Copy:

Fish, Bob

From: Rachel Del Rio [RDelrio@smud.org]
Sent: Friday, October 30, 2009 4:11 PM
To: Fish, Bob
Subject: FW: Sac City College Pedestrian Crossing

Bob! I just got this in this afternoon! Hope this helps, if you need anything else, let me know.

Rachel V. Del Rio
Land Agent
SMUD Real Estate Services
PO Box 15830 MS B304
Sacramento, CA 95852-1830
(916) 732-5997

From: Timothy Talbert
Sent: Friday, October 30, 2009 2:39 PM
To: Rachel Del Rio
Subject: RE: Sac City College Pedestrian Crossing

Rachel,

Based on a quick assessment of the information provided, this project will require raising the transmission, distribution and communication lines to provide adequate clearance to the pedestrian crossing. At a minimum, this will require replacement of two (2) poles and, depending on structural impacts to adjacent poles, possibly two (2) additional poles will require replacement. Recent cost estimates to replace poles of similar size and configuration totaled $52,000 per pole. Given that, my rough estimate for this project is between $100,000 and $200,000.

Also, please note that poles of this type have a 4- to 6-month lead time for fabrication.

Thanks,

Tim

Utility Letter – AT&T:

Bob Fish

From: Ryan Moore [rMoore@cityofsacramento.org]
Sent: Wednesday, June 10, 2009 8:23 AM
To: Bob Fish
Subject: utility letter

Hey Bob,

I got a response from AT&T. Its short & sweet - they have nothing in the area. Please incorporate in the report with the rest of the utility information.

Ryan

Appendix D
Environmental Issues

Environmental Issues

The proposed project is a joint project by the City of Sacramento and Caltrans as delegated by FHWA, and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The City of Sacramento is the lead agency under CEQA. Caltrans, as delegated by FHWA, is the federal lead agency under NEPA.

Caltrans, as delegated by FHWA, will issue a Categorical Exclusion pursuant to NEPA for the proposed project. It is anticipated that Caltrans will issue the Categorical Exclusion in February or March 2010...

PMC, on behalf of the City of Sacramento Department of Transportation, completed an initial study (IS) with supporting environmental studies, which provides justification for a Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (CEQA) for the proposed project. The Draft IS/MND was circulated to the public for 30 days beginning August 10, 2009. One comment was received on the document and was responded to in the Staff Report prepared for the project for City Council review. A Mitigation Monitoring and Reporting Program prepared for the project will also adopted by the Sacramento City Council concurrently with certification of the MND.

The IS identified potentially significant impacts from the project in the areas of Aesthetics, Hazardous Materials, and Construction Noise. The following mitigation measures were identified to reduce all impacts to less than significant levels under CEQA. A draft report and technical studies have been prepared and are available for review. [See REFERENCE C.]

Visual Site Assessment (also, refer to the Aesthetics section below)

Wherever feasible, construction materials and debris should be stored away from highly visible areas, which shall include, but not be limited to, the highly-traveled Sacramento City College campus facilities, such as Hughes Stadium.

Construction lighting should be faced downward and away from traffic lanes and areas where lighting could disturb passing drivers and/or pedestrians.

Lighting poles and signs should be designed to minimize reflection to the extent feasible. All surfaces should be painted with an anti-reflective coating or otherwise treated to reduce light reflection.

Hazardous Materials (also, refer to the Hazardous Materials/Waste section above)

Prior to start of construction, the construction contractor shall designate staging areas where fueling and oil-changing activities will take place. The staging area(s) shall be reviewed and approved by City of Sacramento's Resident Engineer for the project and the Storm Water Pollution and Prevention Manager prior to the start of construction. No fueling and oil-changing activities shall be permitted outside the designated staging areas. The staging areas, as much as practicable, shall be located on level terrain and away from sensitive land uses such as residences, day care facilities, and schools. The proposed staging areas shall be identified in the Storm Water Pollution Prevention Plan (SWPPP).

Prior to the start of construction, the depth and location of gas pipelines shall be determined and mapped by the appropriate agency and provided to the City to insure that project construction activities would not disrupt or damage the natural gas pipelines.

Should pole removal or relocation be necessary for the project, the City shall obtain from the utility owner data warranting that these transformers are free of PCB contaminated oil. If transformers contain PCBs, they shall be handled and disposed of in accordance with applicable hazardous materials regulations.

For any areas of construction proposed within the Active Union Pacific Yard, a site-specific surface and subsurface investigation for Constituents of Concern shall be completed prior to start of construction. Investigation, construction, and remediation activities shall be conducted pursuant to DTSC protocols, including DTSC review and concurrence with comprehensive work plans, soil management plans, and health and safety plans. Any reports generated from the investigations shall be submitted to DTSC.

For construction activities in the area of the former U.S. Cold Storage property, a further search of available existing environmental documentation (including work that may have been performed prior to construction of the Sacramento City College parking structure) is recommended to better define the status of site investigation and remediation activities. If documentation is insufficient to determine the presence or absence of hazardous levels of constituents of concern, then a targeted investigation shall be conducted to determine the presence or absence of hazardous levels of constituents of concern.

Throughout the project construction area, site specific Phase II soil sampling for hazardous materials shall be conducted in areas where ground disturbing activities would take place as part of project construction. If constituents of concern are identified, applicable regulatory requirements regarding disposal or reuse of contaminated materials shall be followed.

Noise (from Project Construction)

Site preparation and construction activities along the light rail and UPRR tacks (i.e., construction areas closest to sensitive receptors) shall be limited to between the hours of 7:00 a.m. to 6:00 p.m. Monday through Saturday, and 9:00 a.m. to 6:00 p.m. on Sunday. Noise-generating construction equipment maintenance activities shall be limited to the same hours (City of Sacramento, Noise Control

Construction equipment shall be equipped with mufflers, in accordance with manufacturers' specifications. Additionally, equipment staging areas shall be located at the furthest distance possible from nearby residential land uses.

With implementation of the above mitigation measures, all potential environmental impacts from the construction and operation of the project are considered less than significant under CEQA.
With certification of the Final IS/MND and adoption of the Mitigation Monitoring and Reporting Program by the Sacramento City Council, and with issuance of a Categorical Exclusion by Caltrans, all CEQA and NEPA documentation and approvals are complete.

Appendix E
Hazardous Materials/Waste

Hazardous Materials/Waste

The Initial Site Assessment (ISA) for this project site has been completed. The ISA is critical at this site as it has already been identified to contain hazardous materials. The ISA further identified the presence of hazardous material/waste at the crossing site. A draft report has been prepared and is available for review. [See REFERENCE B at the end of this document.]

Sites with Potential Contamination/Hazardous Materials Issues

Following is a list of parcels within the general project area that were identified as having potential contamination and/or hazardous material issues that could impact project land acquisition and/or construction. Parcel numbers are based on the Sacramento County Assessor's Office parcel viewer website. For further description of the issues associated with each parcel, refer to the report.

- Curtis Park Village - APN # 013-1010-027
- Additional Parcel- APN # 013-0010-028
- Western Pacific Loop - APN # 013-0010-008/009
- Active Up Yard/Light Rail Corridor - APN # 013-0010-029
- Former Us Cold Storage Property (Sacramento City College Parking Facilities)- APN # 013-0010-002
- Sacramento City College - APN # 013-0010-014

General Contamination/Hazardous Materials Issues

Following is a list of general contamination and potential hazardous materials issues that may impact proposed improvements within the project area. Many of these issues prevail across existing parcel and property boundaries, and are not confined to any one, single parcel.

Active Rail Operations

Normal active railroad operations within the Active UP Yard are not generally subject to mandatory environmental assessment, therefore relatively limited existing information regarding subsurface conditions is available for this portion of the project area. In addition to contaminants known to exist in the railroad right-of-way such as lead and arsenic (associated with slag ballast), there may exist a variety of potential contaminants resulting from day to day operations over many decades, and if present, may become an issue for both worker safety and property acquisition. Therefore it is recommended that a surface and subsurface assessment be performed for any proposed acquisition of property within the Active UP yard. The City of Sacramento must make an assessment of their risk in acquiring potentially impacted property. The DTSC has indicated that investigation/construction/remediation activities within the Active Yard would be subject to their review and protocols, particularly in the preparation of soil management and health and safety plans.

Sites Currently Undergoing or Scheduled For Future Remediation

The report identifies several parcels on which remediation has been performed or will be performed in the near future under the direction of the DTSC. The remediation consists predominantly of shallow soil excavation (generally within the upper five feet; deeper in some locations) in areas identified as exceeding the Remedial Action Objectives (RAOs). It should be noted that although these parcels are being remediated to the standards approved by the DTSC for future residential development, this does not preclude encountering an undiscovered zone exceeding the RAOs. In addition it should be understood that soil meeting the RAOs may still be subject to regulatory requirements regarding disposal or reuse. A table listing the RAO's is included as Appendix A of the ISA report.

One site, the former US Cold Storage facility, is listed on the DTSC Envirostore Database as "Inactive-Action Required". The status of this site investigation/remediation is unclear and will need to be confirmed if the project includes a portion of this parcel.

Transformers

The scope of this assessment did not include an inventory of past and present transformers on parcels identified within the project area. During site reconnaissance, several pole- mounted electrical transformers within the proposed project area were noted. It is recommended that the utility owners provide data to the City, warranting that these transformers are free of PCB contaminated oil, should pole removal or relocation be necessary for the project. If PCBs are present, they are the responsibility of the

transformer owner, and should be disposed of in accordance with current regulations.

The former UP maintenance yard contained a transformer along the east property line which was removed and tested for PCBs as part of the overall site remediation.

Underground Product Distribution Lines

Natural gas pipeline warning signs were observed within the active UP corridor just south of the proposed project area (below the Sutterville Road overpass). It is assumed that the buried pipelines follow the Union Pacific Railroad right-of-way through the project area. No record of contamination resulting from these lines was discovered in our assessment; however, there is always the potential for unidentified leaks along the pipes.

Appendix F
Geotechnical Issues

Geotechnical Issues

A Preliminary Geotechnical/Geology Memorandum has been completed. The report also includes foundation recommendations for the bridge and overcrossing alternatives, Seismic Data, Liquefaction Potential, and Corrosion Evaluation. The Preliminary Geotechnical/Geology Memorandum is available for review. [See REFERENCE B]

New boring or test pits were not conducted for this Feasibility Study. The following discussion of subsurface soil conditions is based on review of the Log of Test Borings (LOTB) for the Sutterville Road Overhead and the boring logs from the Geotechnical Report for the Sacramento City College Parking Structure.

Subsurface Soil Conditions

The logs indicate that the near surface soil (upper 5 to 9 feet) consists of very stiff to hard, reddish brown to strong brown, sandy silt and sandy clay. Underlying the near surface soil at depths ranging from about 5 to 12 feet below the surface, the logs show a variably cemented, hard to very hard, sandy silt and sandy clay. Below 12 ft, the subsurface soil consists of interbedded layers of stiff to hard, sandy silt and sandy clay, and medium dense to dense, silty/clayey sand to the depths explored.

Copies of the existing LOTBs are included in the Preliminary Geotechnical/Geology Memorandum.

Foundation Recommendations

Based on review and analysis, the site is conducive to spread footings, driven piling, precast prestressed concrete piles, HP piles, or Cast-in-drilled-holes (CIDH).

Driven piles will likely require pre-drilling due to the hard soil layers encountered within the upper 5 to 15 ft of the surface. Standard HP section piles will have deeper tip elevations than Standard driven concrete piles for the same lateral and vertical load combinations, and vertical Standard HP section piles will generally have 2 to 3 times less lateral capacity than vertical Standard driven concrete piles.

Cast-in-drilled-hole (CIDH) piles are technically feasible for structural support, however CIDH piles that extend below the ground water table may require temporary casing, slurry drilling or tremie concrete placement during construction.

It is anticipated that 45 ton piles (CIDH, HP, and concrete piles) will extend about 25 to 50 ft below original grade. Spread footings were used for the design and construction of the Sutterville Road Overhead Bridge and are considered a feasible alternative for this project. Specified dimensions of the spread footings will depend on area available, the vertical loading requirements, and the subsurface soil conditions including liquefaction potential (if present). It is anticipated that Bottom-of-footing elevations would be 4 to 9 ft below original grade with an estimated allowable bearing capacity of 3 to 4 ksf.

Seismic Data

The Coast Ranges Sierran Block Fault is the nearest known active fault to the proposed project site and is located approximately 25.5 miles to the west (Figures 2 in the Preliminary Geotechnical/Geology Memorandum). At this distance the fault poses no ground rupture threat to the proposed crossing.

Groundwater

Groundwater was detected in borings the Sutterville Road Overhead LOTB at approximately 30 to 40 feet, with corresponding elevations ranging from -5 to -15 feet mean sea level (MSL). Other historical data on groundwater depths at the site include the hydrograph from the Department of Water Resources indicating a ground water depth of 28 feet (-3ft MSL) and boring logs for the Sacramento City College Parking Structure indicating a ground water depth of 15feet below original ground (0 MSL).

Liquefaction Potential

Liquefaction can occur when loose to medium dense, granular, saturated soils (generally within 50 feet of the surface) are subjected to ground shaking. Existing subsurface information near the project site indicates generally stiff soil conditions within the upper 50 feet of original grade. Current ground water levels are likely between 25 to

30 feet below original grade within the project area. Based on the subsurface conditions and the peak ground acceleration of 0.28g, the potential for detrimental liquefaction is considered to be very low.

A liquefaction analysis should be performed during preparation of the design-level Foundation Report, including mitigation recommendations if deemed necessary.

Corrosion Potential

Testing for corrosion potential was not performed for this Feasibility Study. Soil corrosion testing should be performed on future samples obtained for the Foundation Report used in final design of the crossing. In the event that the site is considered corrosive, corrosion mitigation recommendations should be presented in the Foundation Report according to Caltrans Corrosion Guidelines, Version 1.0, dated September 2003.

Geology

Upper Layers	Lower Layer	Foundation Type	Corrosion Potential	Max EQ/ Accel	Caltrans SDC Curve	Max ARS
1) very stiff to hard, sandy silt and sandy clay 2) variably cemented, hard to very hard, sandy silt and sandy clay	3) interbedded layers of stiff to hard, sandy silt and sandy clay, and medium dense to dense, silty/clayey sand	Driven steel HP or concrete piles, cast-in-drilled hole (CIDH and spread footings are all considered feasible.	It is recommended that soil corrosion testing be performed based on Caltrans Corrosion Guidelines as part of the Foundation Report for final design.	MCE Magnitude 7.25 Max. Bedrock Acceleration 0.28g	Figure B.8 @ 0.2g and Soil Type D	0.80

Notes:
A Preliminary Geotechnical/Geology Memorandum has been completed. The report also includes foundation recommendations for the bridge and overcrossing alternatives, Seismic Data, Liquefaction Potential, and Corrosion Evaluation. The Preliminary Geotechnical/Geology Memorandum is available for review. [See REFERENCE B at the end of this document.]

1. The Coast Ranges Sierran Block Fault is the nearest known active fault to the proposed project site and is located approximately 25.5 miles to the west (Figures 2 in the Preliminary Geotechnical/Geology Memorandum). At this distance the fault poses no ground rupture threat to the proposed crossing.
2. Logs of Test Borings (LOTB) are available for the nearby Sutterville Road Overhead Bridge, located at the southern end of this projects study limits. Boring logs and test pit logs are presented in the Preliminary Geotechnical/Geology Memorandum.
3. The near surface soils (upper 5 to 9 feet) consists of very stiff to hard, sandy silt and sandy clay. Underlying this is a variably cemented, hard to very hard, sandy silt and sandy clay. At depths below 12ft, soil consists of interbedded layers of stiff to hard, sandy silt and sandy clay, and medium dense to dense, silty/clayey sand. Liquefaction potential at the site is therefore low.
4. Groundwater was detected in borings the Sutterville Road Overhead LOTB at approximately 30 to 40 feet, with corresponding elevations ranging from -5 to -15 feet mean sea level (MSL). Other historical data on groundwater depths at the site include the hydrograph from the Department of Water Resources indicating a ground water depth of 28 feet (-3ft MSL) and boring logs for the Sacramento City College Parking Structure indicating a ground water depth of 15feet below original ground (0 MSL).

Appendix G
Design Guidelines

Design Guidelines

This section provides design guidelines for the City College Light Rail Station Pedestrian/Bicycle Crossing Project. Since the proposed alternative for this crossing has been selected, as will be discussed in the following section, "Proposed Alternative," including horizontal and vertical alignment for the proposed bridge and approach ramps, some of the following discussions and guidelines relate specifically to this alignment.

The following discussion and the design guidelines provided here are intended to supplement rather than supersede relevant codes, regulations, and good design judgment.

General

Design of this bicycle/ pedestrian crossing shall conform to the requirements of the 2010 Sacramento City / County Bikeway Mater Plan, Chapter Nine - Design Standards, which refer to Caltrans Bikeway Design Standards (Section 1000 of the Highway Design Manual), 2001.

Structural Design of Overcrossings (bridge) and Undercrossings (tunnel)

Bridge and tunnel design shall conform to the requirements for pedestrian and bicycle bridges within the latest edition of the California Department of Transportation (Caltrans) Bridge Design Specifications.

Traveled-Way Geometry

Surface of Traveled Way and Adjacent Areas

A smooth riding surface is important to all wheeled users; however, skid resistant qualities must not be sacrificed. Coarse broom or burlap drag finishes on concrete surfaces can present a hazard to in-line skaters and other small-wheeled users and are therefore unacceptable. A highly troweled finish is equally unacceptable because it can become slippery under wet conditions.

Ramp Slope and Resting Spots

A 1:20 (5%) slope is the steepest rise which meets ADA criteria for a sidewalk. Steeper slopes shall not exceed 8% and require flat landing spots every 50 horizontal feet. The proposed alternative bridge crossing for this project uses an 8% slope with landings for the first sections of each approach ramp and 5% or less elsewhere.

Vertical Clearance for Bicycles

The minimum vertical clearance to any structure below which the bike trail passes shall be 8'-0" per Caltrans Bikeway Design Standards (Section 1000 of the Highway Design Manual), 2001. This shall include the clear height for any underground (tunnel) alternatives, approach ramp that loops back under itself, and end span of approach ramp approaching ground level unless traffic is restricted from crossing under a lower height by the use of railing.

The minimum vertical clearance to any overhead utility shall be 14'.

Stairways

This study anticipates that stairways will be included in the final design to provide for a shorter total crossing length for the able bodied. Stairways would be located at the turns at both ends of the main crossing spans where they will land in close proximity to the beginning of the ramps. Community comments have been very positive for their inclusion in this project.

Width and User Separation

Multi-use trail guidelines are generally consistent regarding appropriate two-way trail widths. For bikes, guidelines state that 10-12 feet are needed for overall width, and that 8 feet may suffice only when warranted by special circumstances such as:

- very little use by pedestrians
- gentle grades
- excellent sightlines

When guardrails are placed at the immediate edge of a pathway, the effective usable width is reduced by an amount called the "shy" distance. Logic would therefore dictate that the width of multi-use trails be increased by shy distances whenever fencing or guardrails are needed. The shy distance from continuous objects like fences or walls may be as little as one foot, according to the Caltrans Highway Design Manual, "If a wide path is paved contiguous with a continuous fixed object (e.g. block wall), a 100 mm (4") white edge stripe, 0.3 m (one foot) from the fixed object, is recommended to minimize the likelihood of a bicyclist hitting it."

ADA requires a minimum of five feet for two-way traffic, wheelchair passing or turnaround, or side-by-side wheelchair use, but 5'-6" is preferred.

Based on the above considerations, the total minimum width of the traveled way, inside barrier to inside barrier, shall be a minimum of 10 feet and the two directions should be separated by a solid yellow stripe. The minimum is based on the tight constraints of the west approach ramp for the preferred alternative bridge crossing. A wider traveled way would force the opposing ramp lengths (either side of the hairpin turn) inward and result in a higher risk of truck impact. Final design should further evaluate this geometry with the goal to increase the minimum width to up to 12 feet.

Railing and Fencing

There are three fundamental cross-section conditions for the traveled way affecting guardrail and fencing geometry:

1. paved open pathway with no guardrails
2. free-span with guardrails only
3. free-span with guardrails and missile-proof fencing

Additionally, curves or a steep grade may have some affect on how guardrails and fencing should be configured.

Railing:

Railing requirements differ according to the location of the pathway (height above the ground and whether roadways run below), the type of user (pedestrians and people with wheelchairs as opposed to bicyclists), and the slope of the pathway. According to the Caltrans Memo to Bridge Designers, the rail must extend all the way to the bottom of the ramp. The accepted minimum guardrail height for pedestrians and wheelchairs is 42 inches above the pathway surface. The recommended bicycle guardrail height is 4'-6", which controls and shall be used for this project.

Missile-proof fencing:

The Union Pacific Railroad requires a type 3 missile-proof fencing configuration on the portion of the pedestrian structure directly above the tracks. This enclosure must be at least 8'-3" high and extend 3 feet inward at the top.

While missile-proof fencing will only be required on approximately 250 feet out of a total of approximately 1200 feet of bridge and approaches, it will be a prominent visual element on the most visible portion of the facility. Public meeting feedback indicates that typical chain link fencing will not be acceptable. In any case, high transparency has been identified as a key design criterion for both safety and aesthetics.

Design Speed

For grades steeper than 4%, Caltrans has established 25 mph as the minimum design speed for class 1 bike paths. However, due to the restricted geometry for this project requiring tight radius turns, the design speed for the bicycle/pedestrian bridge alternative and approaches shall be 10 mph on the approach ramps and 15mph on the main crossing. At the hairpin turns, signs shall be posted warning of the tight radius;

design speed shall be 5mph. The term "design speed" does not denote the speed at which most users are expected to travel. Design speed instead denotes the speed for which a facility must be designed to result in safe use under most conditions.

Formula for Radius Calculation - The minimum design radius of curvature shall be based upon the following formula:

$$R = \frac{V^2}{15(e/100 + f)}$$

where:

R = Minimum radius of curvature (ft.)
V = Design speed (Mph)
e = Rate of bikeway super elevation (assume 2%, which is minimum for drainage at curves)
f = Coefficient of friction (assume 0.31 for slower curve speeds)

Therefore, as an example, for bridge alternative with hairpin center line radius of 13.5 feet to center, the turn should be posted for a maximum speed of 7mph, based on inside radius of 11.0 feet to center line of lane. However, as noted above, 5mph is recommended.

Cross-Slope or Superelevation

A minimum cross-slope of 1% should be provided on all paved surfaces to ensure adequate drainage. 2% is recommended at curves, which shall slope inward. Sloping in one direction should be used instead of crowning unless required in local areas for drainage. While steeper cross-slopes would assist bicyclists and other faster moving users, cross-slopes in excess of 2% are reportedly disconcerting and potentially unsafe for wheelchairs.

Curves

Caltrans bikeway design criteria establish minimum radii of curvature, with a 250 foot radius being desired for a 15mph design speed However, the site geometry and structural feasibility constraints on this project make these radii impossible, other measures shall be used to ensure safety and functionality.

Specifically, for the hairpin turns of the approaches as noted above under design speed, geometric constraints make it difficult to achieve a curve with a radius that will enable a bicyclist to maintain the design speed of the tangent portions of the ramps. Therefore, to ensure an adequate level of safety special attention should be given to accident-related safety features such as signage, striping, sightlines, pathway pavement surface texture and color, maintaining a level (zero slope) throughout the turn, possible widening of the traveled way, and possible use of a steeper superelevation.

Sightlines

Caltrans bikeway guidelines provide sight stopping distance guidelines, which should be further evaluated in final design.

Sightlines in general:

Because train traffic noise on the LRT and UPRR tracks will generally exceed levels adequate to hear approaching cyclists clear sightlines are of primary importance to ensure safety.

Maximum visibility by one bridge user of other bridge users should be established as a design goal. The design viewing and viewed object height is usually considered to be 54" above the traveled way surface.

Sightlines on approach ramps:

At a point near the first turn from the bottom of a ramp, another bridge user anywhere on the lower ramp and plaza area shall be visible to a descending bridge user. A descending bridge user at the top of the ramp (at the point where the alignment turns toward crossing the UPRR right-of-way), shall be able to see a bridge user anywhere on the upper half of the approach ramp, as well as on the main bridge crossing.

This guideline is not intended to prevent tree or shrub planting in the approach areas. However, to achieve

the intent of the guideline, special attention should be given to the selection, maintenance, and locations of trees and shrubs.

Sightlines within the UPRR right-of-way (main bridge crossing spans):

Where the bridge passes through the UPRR right-of-way, required missile-proof fencing will create a condition where the open path becomes similar to an enclosed corridor, and sight distances will be affected.

Visibility issues are very important from both a crime- and accident-safety point of view, and will have a strong impact on the success of the architectural space created.

On a straight, fenced pathway the angle of incidence of the viewer's sightline with the fencing becomes increasingly acute with increasing distance from the viewer. When the angle of incidence becomes sufficiently acute, the view through the fencing becomes completely obscured and a tunnel effect is created. This effect must be considered for both views form and of the main crossing spans.

Appendix H
Estimate of Probable Construction Costs – Backup Data

Proposed Alternative, First: PS/CIP

[ ] GENERAL PLAN ESTIMATE [X] ADVANCE PLANNING ESTIMATE

Revised - December 3, 2007

RCVD BY: IN EST: OUT EST:

BRIDGE: Sac City College/LRT Bike Bridge BR. No.: DISTRICT:
TYPE: PS/CIP and RC/CIP U Girder RTE:
19 Span (141' main, and varies), D = 3'-0" approaches, 5'-3" main
CU: CO: Sac
EA: PM:

LENGTH:	Structure	948.87	WIDTH: 12.00	AREA (SF)=	11,386
	Embankment Approaches	214.00	12.00		2,568

LIM AND NASCIMENTO ENGINEERING CORPORATION
OF STRUCTURES IN PROJECT : EST. NO. 1
PRICES BY : Bob Fish COST INDEX:
PRICES CHECKED BY : DATE:
QUANTITIES BY: Bob Fish DATE: 6/8/2009

	CONTRACT ITEMS	TYPE	UNIT	QUANTITY	PRICE	AMOUNT
	STRUCTURAL ITEMS:					
1	STRUCTURE EXCAVATION (BRIDGE)		CY	179	$ 90.00	$16,110.00
2	STRUCTURE BACKFILL (BRIDGE)		CY	469	$ 110.00	$51,590.00
3	FURNISH PILING	CLASS 90	LF	360	$ 20.00	$7,200.00
4	DRIVE PILE	CLASS 90	EA	12	$ 1,600.00	$19,200.00
5	36" CAST-IN-Drilled-Hole CONC. PILING	36"	LF	511	$ 350.00	$178,850.00
6	PRESTRESSING CAST-IN-PLACE CONCRETE		LB	16,166	$ 4.50	$72,747.00
7	STRUCTURAL CONCRETE, FOOTING		CY	26	$ 650.00	$16,900.00
8	STRUCTURAL CONCRETE, BRIDGE		CY	870	$ 860.00	$748,200.00
9	MINOR CONCRETE (DRIVEWAY)		CY	40	$ 550.00	$22,000.00
10	JOINT SEAL (MR = 1/2")	A	LF	24	$ 23.00	$552.00
11	BAR REINFORCING STEEL (BRIDGE)		LB	224,650	$ 1.25	$280,812.50
12	PEDESTRIAN RAILING	architectural	LF	1,907	$ 200.00	$381,400.00
13	CHAIN LINK RAILING (TYPE 7)	architectural	LF	455	$ 75.00	$34,125.00
14	BRIDGE LIGHTING		LS	1	$ 145,358.75	$145,358.75
	CIVIL ITEMS:					
15	ROADWAY REALIGNMENT		SF	11,280	$ 15.00	$169,200.00
16	LANDSCAPING AND IRRIGATION		LS	1	$ 35,250.00	$35,250.00

SUBTOTAL		$2,179,495.25
TIME RELATED OVERHEAD		$ 108,974.76
MOBILIZATION (@ 10 %)		$ 254,274.45
SUBTOTAL BRIDGE ITEMS		$ 2,542,744.46
CONTINGENCIES	(@ 25%)	$ 635,686.11
BRIDGE TOTAL COST		$ 3,178,430.57
COST PER SQ. FOOT (embankment approaches included)		$ 227.77
WORK BY RAILROAD OR UTILITY FORCES		
GRAND TOTAL		$ 3,178,430.57
BUDGET ESTIMATE AS OF		$ 3,178,000.00

ROUTING
1. DES SECTION
2. OFFICE OF BRIDGE DESIGN - NORTH
3. OFFICE OF BRIDGE DESIGN - CENTRAL
4. OFFICE OF BRIDGE DESIGN - SOUTH
5. OFFICE OF BRIDGE DESIGN - WEST
6. OFFICE OF BRIDGE DESIGN SOUTHERN CALIFORNIA

COMMENTS:

Escalated Budget Estimate to Midpoint of Construction *

Escalation Rate per Year 4.0%

Years Beyond Midpoint	Escalated Budget Est.
1	$3,305,000
2	$3,437,000
3	$3,574,000
4	$3,717,000
5	$3,866,000

* Escalated budget estimate is provided for information only, actual construction costs may vary. Escalated budget estimates provided do not replace Departmental policy to update cost estimates annually.

Proposed Alternative, Second: Tied-Arch

[ ] GENERAL PLAN ESTIMATE [X] ADVANCE PLANNING ESTIMATE

Revised - December 3, 2007

RCVD BY: IN EST: OUT EST:

BRIDGE: Sac City College/LRT Bike Bridge BR. No.: DISTRICT:
TYPE: Tied Arch and RC/CIP U Girder RTE:
19 Span (206' main, and varies), D = 3'-0" approaches, 5'-3" main
CU: CO: Sac
EA: PM:

LENGTH: 1,054.87 WIDTH: 12.00 AREA (SF)= 12,658
Embankment Approaches 214.00 12.00 2,568

LIM AND NASCIMENTO ENGINEERING CORPORATION
OF STRUCTURES IN PROJECT : EST. NO. 1
PRICES BY : Bob Fish COST INDEX:
PRICES CHECKED BY : DATE:
QUANTITIES BY: Bob Fish DATE: 6/8/2009

	CONTRACT ITEMS	TYPE	UNIT	QUANTITY	PRICE	AMOUNT
	STRUCTURAL ITEMS:					
1	STRUCTURE EXCAVATION (BRIDGE)		CY	179	$ 90.00	$16,110.00
2	STRUCTURE BACKFILL (BRIDGE)		CY	469	$ 110.00	$51,590.00
3	FURNISH PILING	CLASS 90	LF	360	$ 20.00	$7,200.00
4	DRIVE PILE	CLASS 90	EA	12	$ 1,600.00	$19,200.00
5	36" CAST-IN-Drilled-Hole CONC. PILING	36"	LF	540	$ 350.00	$189,000.00
6	PRESTRESSING CAST-IN-PLACE CONCRETE		LB	16,166	$ 4.50	$72,747.00
7	STRUCTURAL CONCRETE, FOOTING		CY	26	$ 650.00	$16,900.00
8	STRUCTURAL CONCRETE, BRIDGE		CY	898	$ 860.00	$772,280.00
9	MINOR CONCRETE (DRIVEWAY)		CY	40	$ 550.00	$22,000.00
10	JOINT SEAL (MR = 1/2")	A	LF	24	$ 23.00	$552.00
11	BAR REINFORCING STEEL (BRIDGE)		LB	239,818	$ 1.25	$299,772.50
12	FURNISH STRUCTURAL STEEL (BRIDGE)		LB	46,042	$ 10.25	$471,930.50
13	ERECT STRUCTURAL STEEL (BRIDGE)		LB	46,042	$ 7.50	$345,315.00
14	MISCELLANEOUS METAL (TIE ROD)		FT	1,155	$ 55.00	$63,525.00
15	PEDESTRIAN RAILING	architectural	LF	2,162	$ 200.00	$432,400.00
16	CHAIN LINK RAILING (TYPE 7)	architectural	LF	412	$ 75.00	$30,900.00
17	BRIDGE LIGHTING		LS	1	$ 158,608.75	$158,608.75
	CIVIL ITEMS:					
18	ROADWAY REALIGNMENT		SF	11,280	$ 15.00	$169,200.00
19	LANDSCAPING AND IRRIGATION		LS	1	$ 35,250.00	$35,250.00

SUBTOTAL		$3,174,480.75
TIME RELATED OVERHEAD		$ 158,724.04
MOBILIZATION (@ 10 %)		$ 370,356.09
SUBTOTAL BRIDGE ITEMS		$ 3,703,560.88
CONTINGENCIES (@ 25%)		$ 925,890.22
BRIDGE TOTAL COST		$ 4,629,451.09
COST PER SQ. FOOT (*embankment approaches included*)		$ 304.04
WORK BY RAILROAD OR UTILITY FORCES		
GRAND TOTAL		$ 4,629,451.09
BUDGET ESTIMATE AS OF		$ 4,629,000.00

ROUTING
1. DES SECTION
2. OFFICE OF BRIDGE DESIGN - NORTH
3. OFFICE OF BRIDGE DESIGN - CENTRAL
4. OFFICE OF BRIDGE DESIGN - SOUTH
5. OFFICE OF BRIDGE DESIGN - WEST
6. OFFICE OF BRIDGE DESIGN SOUTHERN CALIFORNIA

COMMENTS:

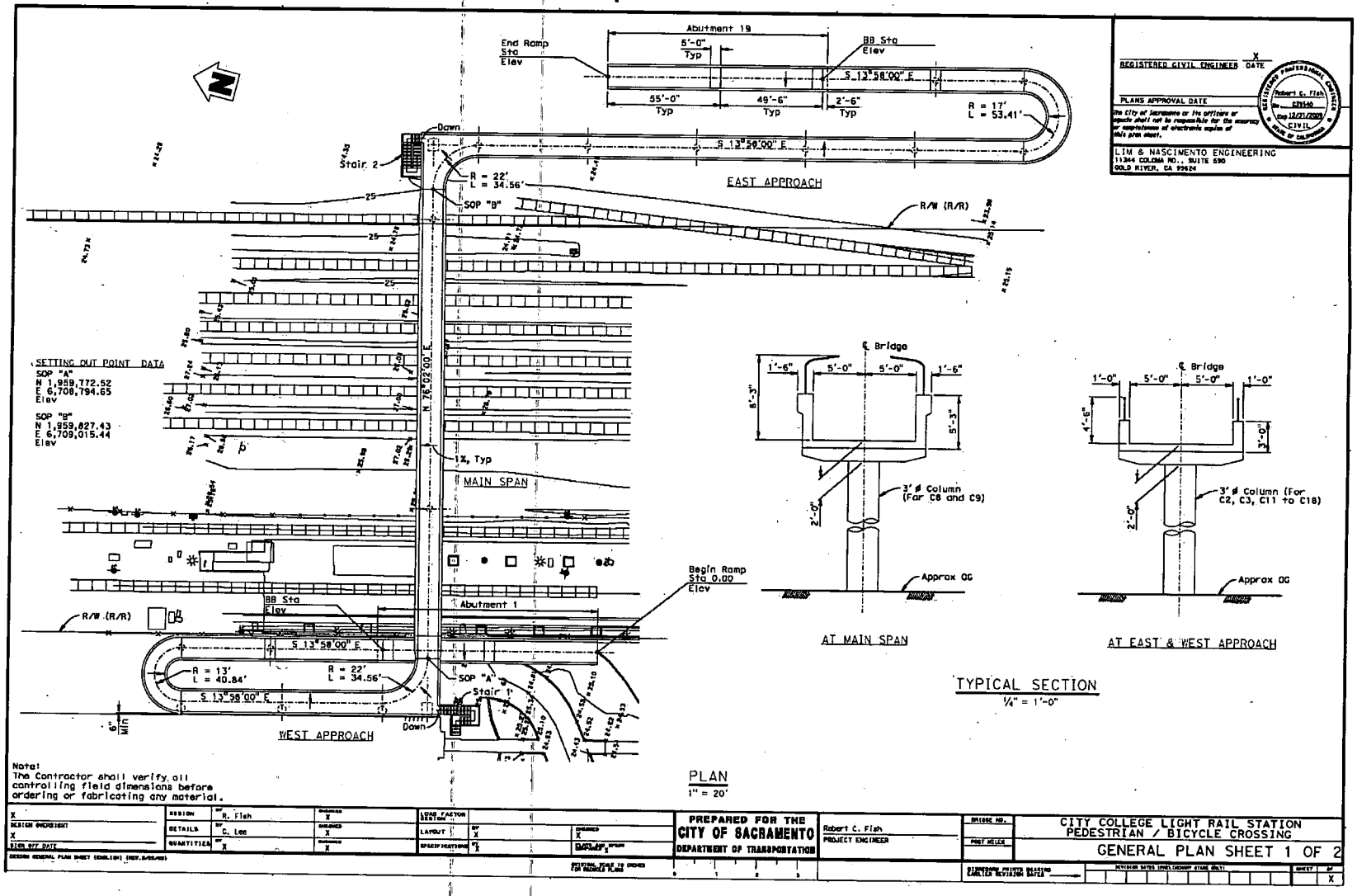
Escalated Budget Estimate to Midpoint of Construction *

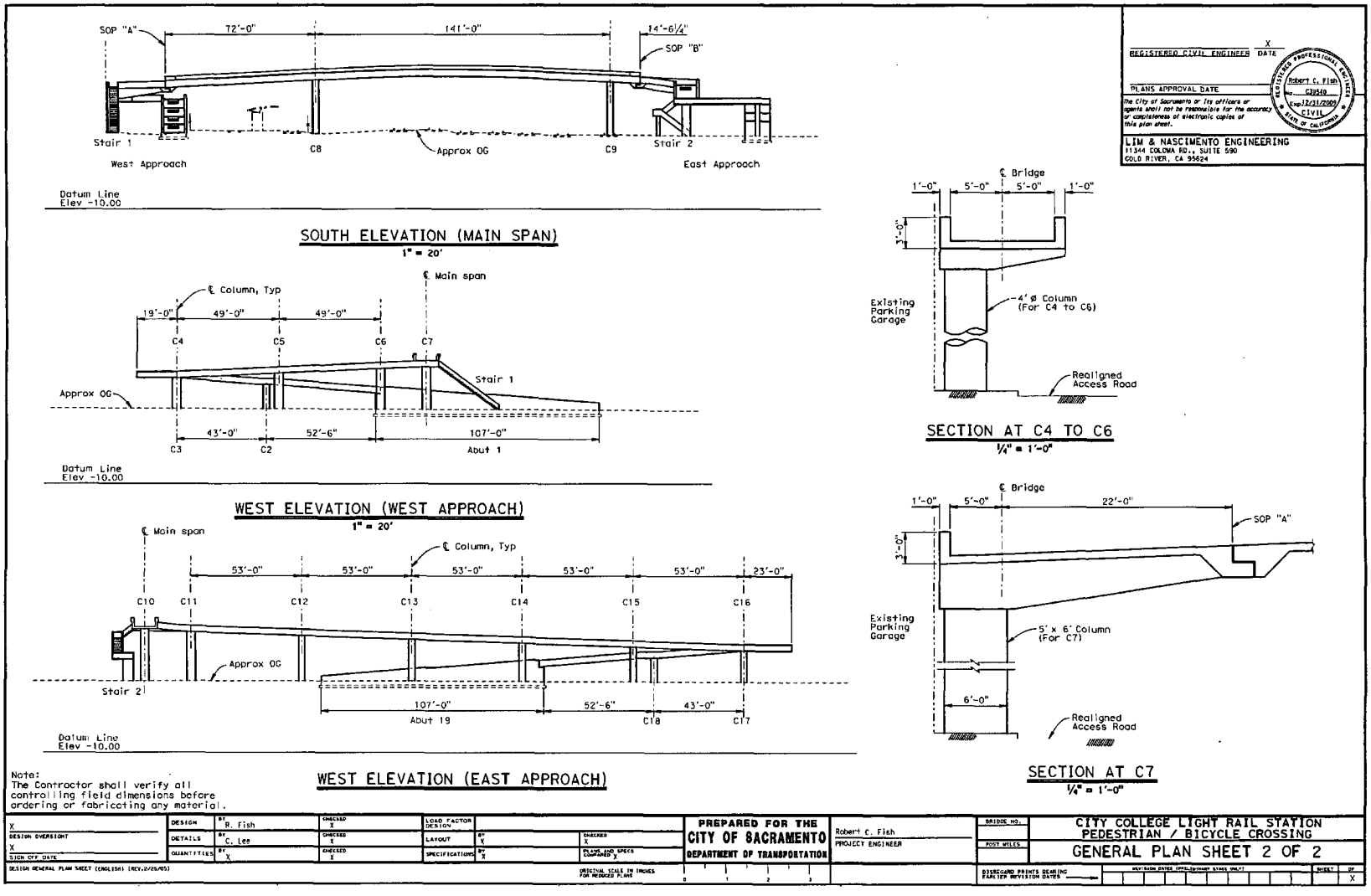
Escalation Rate per Year 4.0%

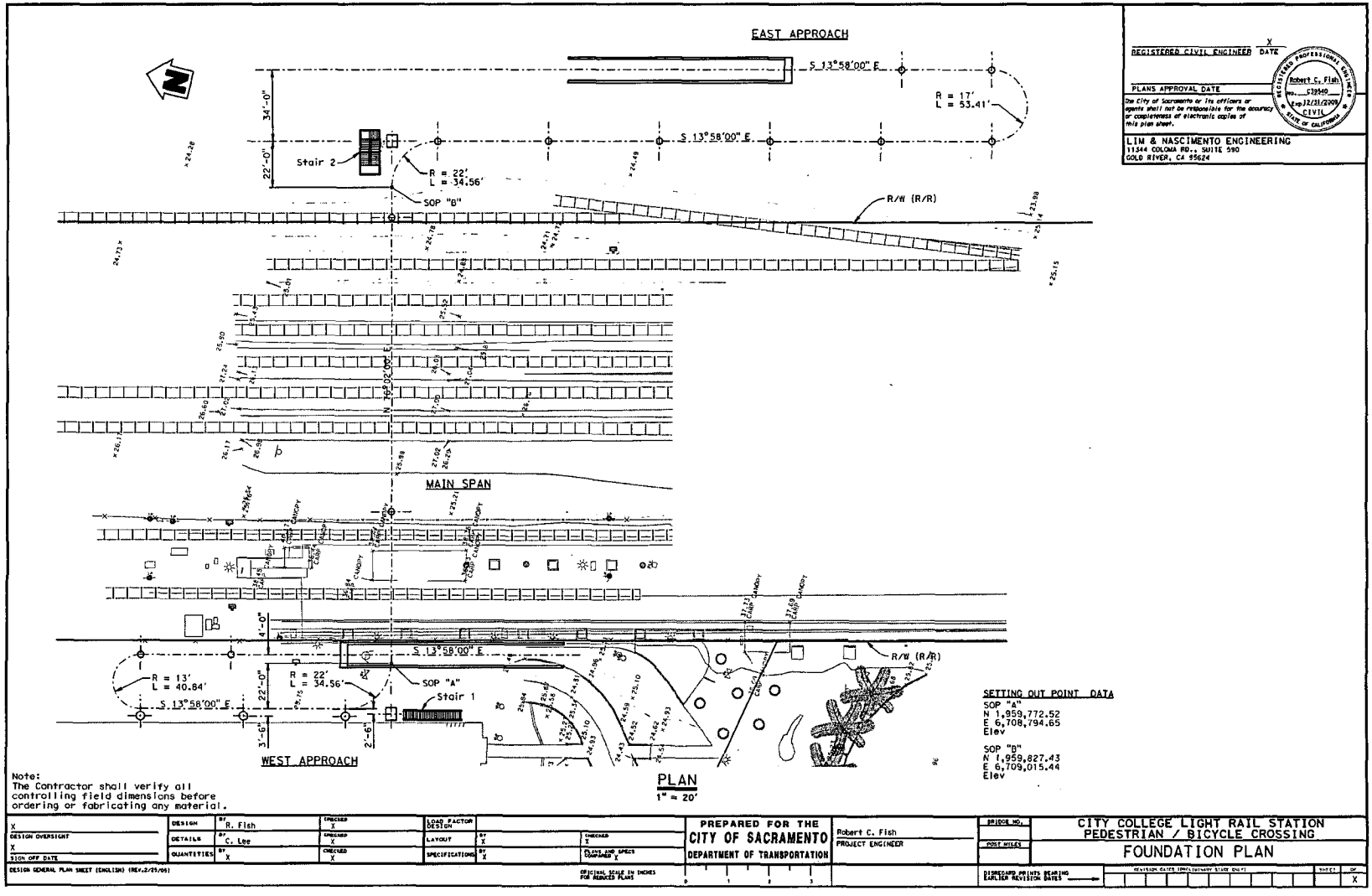
Years Beyond Midpoint	Escalated Budget Est.
1	$4,814,000
2	$5,007,000
3	$5,207,000
4	$5,415,000
5	$5,632,000

* Escalated budget estimate is provided for information only, actual construction costs may vary. Escalated budget estimates provided do not replace Departmental policy to update cost estimates annually.

Appendix I
Proposed Alternative, 30% Design plan sheets




SOP "A"
72'-0"
141'-0"
14'-6¼"
SOP "B"
Stair 1
West Approach
C8
Approx OG
C9
Stair 2
East Approach
Datum Line
Elev -10.00
SOUTH ELEVATION (MAIN SPAN)
1" = 20'
℄ Main span
℄ Column, Typ
19'-0"
49'-0"
49'-0"
C4
C5
C6
C7
Stair 1
Approx OG
43'-0"
52'-6"
107'-0"
C3
C2
Abut 1
Datum Line
Elev -10.00
WEST ELEVATION (WEST APPROACH)
1" = 20'
℄ Main span
℄ Column, Typ
53'-0"
53'-0"
53'-0"
53'-0"
53'-0"
23'-0"
C10
C11
C12
C13
C14
C15
C16
Approx OG
Stair 2
107'-0"
Abut 19
52'-6"
43'-0"
C18
C17
Datum Line
Elev -10.00
WEST ELEVATION (EAST APPROACH)
℄ Bridge
1'-0"
5'-0"
5'-0"
1'-0"
3'-0"
Existing Parking Garage
4' ø Column (For C4 to C6)
Realigned Access Road
SECTION AT C4 TO C6
¼" = 1'-0"
℄ Bridge
1'-0"
5'-0"
22'-0"
SOP "A"
3'-0"
Existing Parking Garage
5' x 6' Column (For C7)
6'-0"
Realigned Access Road
SECTION AT C7
¼" = 1'-0"
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
The City of Sacramento or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.
LIM & NASCIMENTO ENGINEERING
11344 COLOMA RD., SUITE 590
GOLD RIVER, CA 95624
Note:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.
DESIGN
R. Fish
DETAILS
C. Lee
QUANTITIES
LOAD FACTOR DESIGN
LAYOUT
SPECIFICATIONS
PREPARED FOR THE
CITY OF SACRAMENTO
DEPARTMENT OF TRANSPORTATION
Robert C. Fish
PROJECT ENGINEER
CITY COLLEGE LIGHT RAIL STATION
PEDESTRIAN / BICYCLE CROSSING
GENERAL PLAN SHEET 2 OF 2


EAST APPROACH
S 13°58'00" E
R = 17'
L = 53.41'
34'-0"
22'-0"
Stair 2
R = 22'
L = 34.56'
SOP "B"
R/W (R/R)
MAIN SPAN
4'-0"
R = 13'
L = 40.84'
R = 22'
L = 34.56'
SOP "A"
Stair 1
WEST APPROACH
PLAN
1" = 20'
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
The City of Sacramento or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.
LIM & NASCIMENTO ENGINEERING
11344 COLOMA RD., SUITE 590
GOLD RIVER, CA 95624
SETTING OUT POINT DATA
SOP "A"
N 1,959,772.52
E 6,708,794.65
Elev
SOP "B"
N 1,959,827.43
E 6,709,015.44
Elev
Note:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.
DESIGN
R. Fish
DETAILS
C. Lee
QUANTITIES
PREPARED FOR THE
CITY OF SACRAMENTO
DEPARTMENT OF TRANSPORTATION
Robert C. Fish
PROJECT ENGINEER
CITY COLLEGE LIGHT RAIL STATION
PEDESTRIAN / BICYCLE CROSSING
FOUNDATION PLAN

COMMUNITY DEVELOPMENT
DEPARTMENT

PLANNING DIVISION

ENVIRONMENTAL PLANNING
SERVICES
916-808-8419
FAX 916-808-1077

MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

Sacramento City College LRT Station Pedestrian/Bicycle Overcrossing (T15065700) The proposed project consists of development of a pedestrian and bicycle overcrossing with ADA compliant ramps on both ends that extends on the west from the lawn area of Sacramento City College, past the parking garage, then over the LRT tracks, the UPRR main tracks, and the maintenance yard to the proposed Curtis Park Village development on the east. The 2030 General Plan land use designation for the project site is a mix of Public/Quasi-Public and Traditional Center.

The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, reviewed the proposed project and, on the basis of the whole record before it, determined that the proposed project is consistent with the land use designation for the project site as set forth in the 2030 General Plan. The City prepared the attached Initial Study that identifies potentially new or additional significant environmental effects (project-specific effects) that were not analyzed in the 2030 General Plan Master EIR. The City will incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR, and adopt project-specific mitigation measures in order to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Sections 15177(d), 15178(b)(2)). This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required pursuant to the Environmental Quality Act of 1970 (Sections 21000, et seq., Public Resources Code of the State of California).

This Mitigated Negative Declaration was prepared pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.); CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento, and the Sacramento City Code. A copy of this document and all supportive documentation may be reviewed or obtained at the City of Sacramento, Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811. The public counter is open from 9:00 am to 4:00 pm; Monday through Friday.

Environmental Services Manager, City of Sacramento,
California, a municipal corporation

By: _____

Date: 7/9/09

Exhibit C

Department of Toxic Substances Control

Linda S. Adams
Secretary for
Environmental Protection

Maziar Movassaghi
Acting Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Arnold Schwarzenegger
Governor

September 8, 2009

Mr. Scott Johnson
Associate Planner
City of Sacramento
Community Development Department
300 Richards Blvd., 3rd Floor
Sacramento, California 95811

NOTICE OF AVAILABILITY/INTENT TO ADOPT – DRAFT MITIGATED NEGATIVE DECLARATION FOR THE SACRAMENTO CITY COLLEGE LIGHT RAIL TRANSIT (LRT) STATION PEDESTRIAN/BICYCLE OVERCROSSING (T15065700)

Dear Mr. Johnson:

The Department of Toxic Substances Control (DTSC) has reviewed the Draft Mitigated Negative Declaration (DMND) and the initial Study prepared for the Sacramento City College Light Rail Transit (LRT) Station Pedestrian/Bicycle Overcrossing. DTSC is the lead agency overseeing the investigation and remediation of hazardous substances releases at the Union Pacific Railroad Company, Curtis Park Railyard Site. The remediation is being conducted pursuant to an Enforceable Agreement issued in March 1987 by DTSC to Union Pacific Railroad Company (UP). Soil and Groundwater are being remediated in accordance with the 1995 Remedial Action Plan (RAP) approved for the Site. In 2003, Curtis Park Village LLC (CPV), purchased the Inactive Portion of the Railyard from UP and is currently implementing the remediation at the Site. In July, CPV notified DTSC of their intention to amend the approved RAP by including evaluation of additional remedial alternative to address the increase volume of impacted soil required to be remediated at the Site. The proposed project area is located in the City of Sacramento just north of Sutterville Road between Freeport Boulevard to the west and 24th Street to the east. Within the project area is the Sacramento City College main campus. East and adjacent to the main college campus is a LRT station and UPPR tracks, which run in a north-south direction west of 24th Street, and a maintenance yard. Further east of the project areas lies a fallow, undeveloped piece of land that is planned as mixed-use infill development. The proposed Sacramento City College LRT Station Pedestrian/Bicycle Overcrossing project consists of development of a pedestrian and bicycle overcrossing with ADA Compliant ramps on both ends that extends on the west from the lawn area of Sacramento City College, past the parking

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garage, then over the LRT tracks, the UPPR main tracks, and the maintenance yard to the proposed Curtis Park Village development on the east.

The *Hazards and Hazardous* Materials section of the document identified other sites in addition to the Curtis Park Railyard Site that may potentially contain hazardous materials/wastes. DTSC recommends that all areas where contamination may be encountered be investigated and, if necessary, remediated prior to beginning of project activities. In addition, if soil contamination is found at hazardous waste levels, it must be handled, stored, treated, transported, and disposed of in compliance with state and federal laws and regulations. Replacing contaminated soil that is hazardous waste may constitute a release and disposal and require measures to protect public health and the environment.

DTSC has a Voluntary Cleanup Program (VCP) to assist interested parties in evaluating and mitigating risks posed by hazardous substances releases. An interested party can apply for the VCP by utilizing the California Environmental Protection Agency's Brownfield Memorandum of Agreement (MOA) application to request agency oversight of the investigation and remediation of the site. The application form can be found at:

http://www.calepa.ca.gov/Brownfields/MOA/

If you have any questions regarding the comments, please contact me at (916) 255-3643.

Sincerely,

Thomas Tse

Thomas Tse
Project Manager
Brownfields and Environmental Restoration Program

cc: Mr. Philip J. Harvey
Director of Development
Petrovich Development Company
5046 Sunrise Blvd., Suite One
Fair Oaks, California 95628

Mr. Benjamin P. Leslie-Bole, Principal
Environmental Resources Management
1777 Botelho Drive, Suite 260
Walnut Creek, California 94596

cc: Mr. Scott Morgan
Acting Director
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit
1400 Tenth Street
P.O. Box 3044
Sacramento, California 95812

Planning and Environmental Analysis **(sent via email)**
CEQA Tracking Center
Department of Toxic Substances Control
1001 I Street
P.O. Box 806
Sacramento, California 95812-0806

Mr. Fernando Amador, P.E. **(sent via email)**
Supervising Hazardous Substances Engineer
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

CITY OF SACRAMENTO

SACRAMENTO CITY COLLEGE LRT PEDESTRIAN/BICYCLE OVERCROSSING PROJECT

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

Prepared for:

CITY OF SACRAMENTO
DEPARTMENT OF TRANSPORTATION
915 I STREET, 2ND FLOOR
SACRAMENTO, CA 95814

Prepared by:

PMC®

2729 PROSPECT PARK DRIVE, SUITE 220
RANCHO CORDOVA, CA 95670

JULY 2009

CITY OF SACRAMENTO
SACRAMENTO CITY COLLEGE LRT STATION PEDESTRIAN/BICYCLE OVERCROSSING
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

Prepared for:

CITY OF SACRAMENTO
DEPARTMENT OF TRANSPORTATION
915 I STREET, 2ND FLOOR
SACRAMENTO, CA 95814

Prepared by:

PMC®
2729 PROSPECT PARK DRIVE, SUITE 220
RANCHO CORDOVA, CA 95670

JULY 2009

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Appendix A SMAQMD Road Construction Emissions Model

1.0 INTRODUCTION

This Initial Study has been prepared for the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations), and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

1.1 BACKGROUND

The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that the proposed project is an anticipated subsequent project identified and described in the 2030 General Plan Master Environmental Impact Report (Master EIR) certified March 3, 2009 and is consistent with the land use designation and the permissible densities and intensities of use for the project site as set forth in the 2030 General Plan (see CEQA Guidelines Section 15176 (b) and (d)).

The City has prepared the attached Initial Study to (a) review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2030 General Plan Master EIR to determine their adequacy for the project (see CEQA Guidelines Section 15178 (b) and (c)), and (b) identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR (CEQA Guidelines Section 15177(d)). The Master EIR mitigation measures that are identified as appropriate are set forth in the applicable technical sections below.

This analysis incorporates by reference the general discussion portions of the 2030 General Plan Master EIR (CEQA Guidelines Section 15150(a)). The Master EIR is available for public review at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, and on the City's web site at: www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but no later than the end of the 30-day review period.

Please send written responses to:

Scott Johnson
Community Development Department
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811
Direct Line: (916) 808-8419
FAX: (916) 808-1077
srjohnson@cityofsacramento.org

1.2 INTRODUCTION AND REGULATORY GUIDANCE

The City of Sacramento Department of Transportation (City), in cooperation with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), propose to construct a new pedestrian/bicycle overcrossing that would extend from the light rail transit (LRT) station at Sacramento City College to the existing and proposed neighborhoods east of the Union Pacific Railroad (UPRR) tracks.

The proposed project is a joint endeavor by the City of Sacramento and Caltrans and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The City of Sacramento is the lead agency under CEQA while Caltrans, as delegated by FHWA, is the federal lead agency under NEPA.

This document is an Initial Study (IS) with supporting environmental studies, which provide justification for a Mitigated Negative Declaration (MND), pursuant to CEQA, for the proposed project. It is anticipated that Caltrans, as delegated by FHWA, will issue a Categorical Exclusion (CE) pursuant to NEPA for the proposed project.

The Initial Study/Mitigated Negative Declaration (MND) is a public document to be used by the City of Sacramento to determine whether the project may have a significant effect on the environment pursuant to CEQA.

If the CEQA lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment that cannot be mitigated, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an environmental impact report (EIR), use a previously prepared EIR and supplement that EIR, or prepare a subsequent EIR, to analyze the project at hand. If the agency finds no substantial evidence that the project or any of its aspects may cause a significant impact on the environment with mitigation, a Negative Declaration shall be prepared with a written statement describing the reasons why a proposed project, not exempt from CEQA, would not have a significant effect on the environment, and therefore, why it does not require the preparation of an EIR (State CEQA Guidelines Section 15371).

According to CEQA Guidelines Section 15070, a public agency shall prepare a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

a) *The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*

b) *The initial study identified potentially significant effects, but:*

   i. *Revisions in the project plans or proposals made by or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*

   ii. *There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.*

1.3 LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b) (1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." Based on these criteria, the City of Sacramento will serve as lead agency for the proposed Sacramento City College LRT Station Pedestrian/Bicycle Overcrossing project.

According to Council for Environmental Quality (CEQ) Guidelines 1501.5(c), the following factors (which are listed in order of descending importance) shall determine lead agency designation when more than one federal agency is involved in the same action:

1) Magnitude of agency's involvement.

2) Project approval/disapproval authority.

3) Expertise concerning the action's environmental effects.

4) Duration of agency's involvement.

5) Sequence of agency's involvement.

FHWA is anticipated to provide funding for construction of the proposed project. Effective July 1, 2007, Caltrans assumed all of FHWA's responsibilities under NEPA for projects on California's State Highway System and for federal-aid local streets and roads projects under FHWA's Surface Transportation Project Delivery Pilot Program, pursuant to 23 CFR 773. Caltrans also assumed all of FHWA's responsibilities for environmental coordination and consultation under other federal environmental laws pertaining to the review or approval of projects under the Pilot Program. Caltrans, by virtue of it being a transportation agency, has expertise concerning the environmental effects of the proposed action. Caltrans will act on behalf of FHWA as the NEPA lead agency.

1.4 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this IS/MND is to evaluate the potential environmental impacts of the proposed Sacramento City College LRT Station Pedestrian/Bicycle Overcrossing project. Mitigation measures have also been identified to reduce or eliminate any identified significant and/or potentially significant impacts.

This document is divided into the following sections:

1.0 INTRODUCTION

Provides an introduction and describes the purpose and organization of this document.

2.0 PROJECT DESCRIPTION

Provides a detailed description of the proposed project and the alternatives considered.

3.0 ENVIRONMENTAL SETTING, IMPACTS, MITIGATION MEASURES AND DETERMINATION

Describes the environmental setting for each of the environmental subject areas, evaluates a range of impacts classified as "no impact", "less-than significant", "potentially significant unless mitigation incorporated", or "potentially significant" in response to the environmental checklist, and provides mitigation measures, where appropriate, to mitigate potentially significant impacts to a less-than-significant level; and provides an environmental determination of the project.

4.0 SUMMARY OF MITIGATION MEASURES

Provides a summary of mitigation measures for the proposed project.

5.0 LIST OF PREPARERS AND REFERENCES

Identifies staff and consultants responsible for preparation of this document and lists agencies and documents consulted.

2.0 PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

The City of Sacramento Department of Transportation (City), in cooperation with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), propose to construct a pedestrian/bicycle overcrossing that would extend from the light rail transit (LRT) station at Sacramento City College to the existing and proposed neighborhoods east of the Union Pacific Railroad (UPRR) tracks.

2.2 PROJECT LOCATION

The proposed project area is located in the City of Sacramento just north of Sutterville Road between Freeport Boulevard to the west and 24th Street to the east. State Route 99 (SR 99) is located approximately 0.75 mile to the east and Interstate 5 (I-5) is located approximately 1 mile to the west. Within the project area is the Sacramento City College main campus. East and adjacent to the main college campus is a LRT station and UPRR tracks, which run in a north-south direction west of 24th Street, and a maintenance yard. Further east of the project area lies a fallow, undeveloped piece of land, which is planned as a mixed-use infill development (see **Figure 1**, Regional Location Map, and **Figure 2**, Project Location Map).

2.3 PROJECT PURPOSE AND NEED

The purpose of the proposed project is to improve safety conditions across both the LRT and UPRR tracks adjacent to Sacramento City College and to reduce hazardous conditions along the Sutterville Road overhead. Currently, the designated route for foot and bicycle traffic to cross the UPRR tracks between the LRT station and the Curtis Park neighborhoods to the east is the multi-lane and high-speed Sutterville Road overhead. According to the Sacramento Department of Regional Transit, this location is one of the top safety hazard areas along the Department's existing light rail systems. In order to shorten their path, numerous trespassers attempt to cross the wide and heavily used UPRR maintenance yard, main line tracks, and LRT tracks on a daily basis. In addition, the proposed development of the Curtis Park Village is anticipated to result in a growing need for alternative access to reduce conflicts between foot, bicycle, and automobile traffic on Sutterville Road and eliminate the dangerous cut-through traffic over the tracks.

2.4 PROJECT DESCRIPTION

There is currently one project design alternative being considered. The proposed build alternative includes construction of an overcrossing with ADA compliant ramps on both ends that extends from the lawn area of Sacramento City College, past the parking garage, then over the LRT tracks, UPRR main tracks, and maintenance yard to the proposed Curtis Park Village development (see **Figure 3**, Project Footprint Map).

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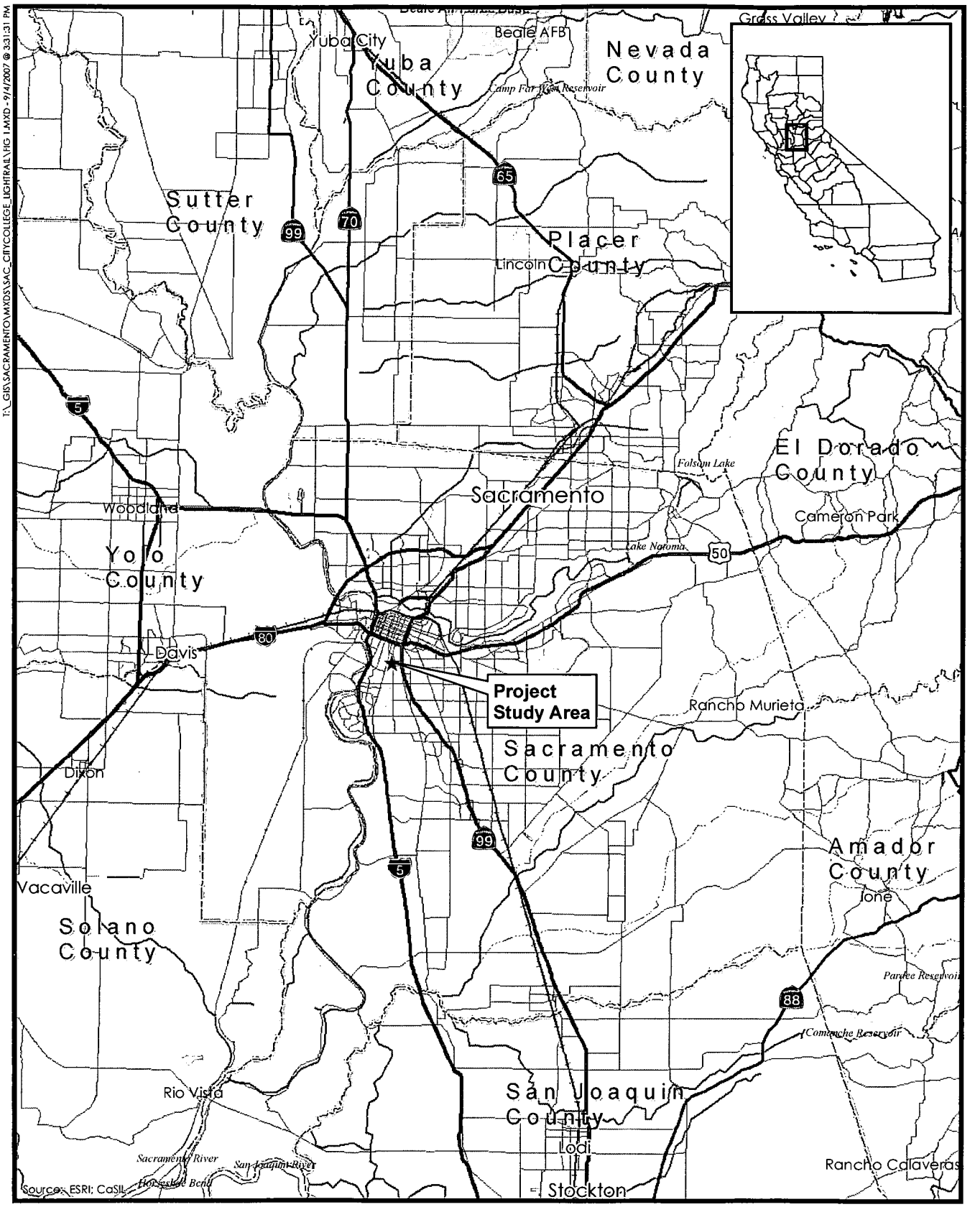
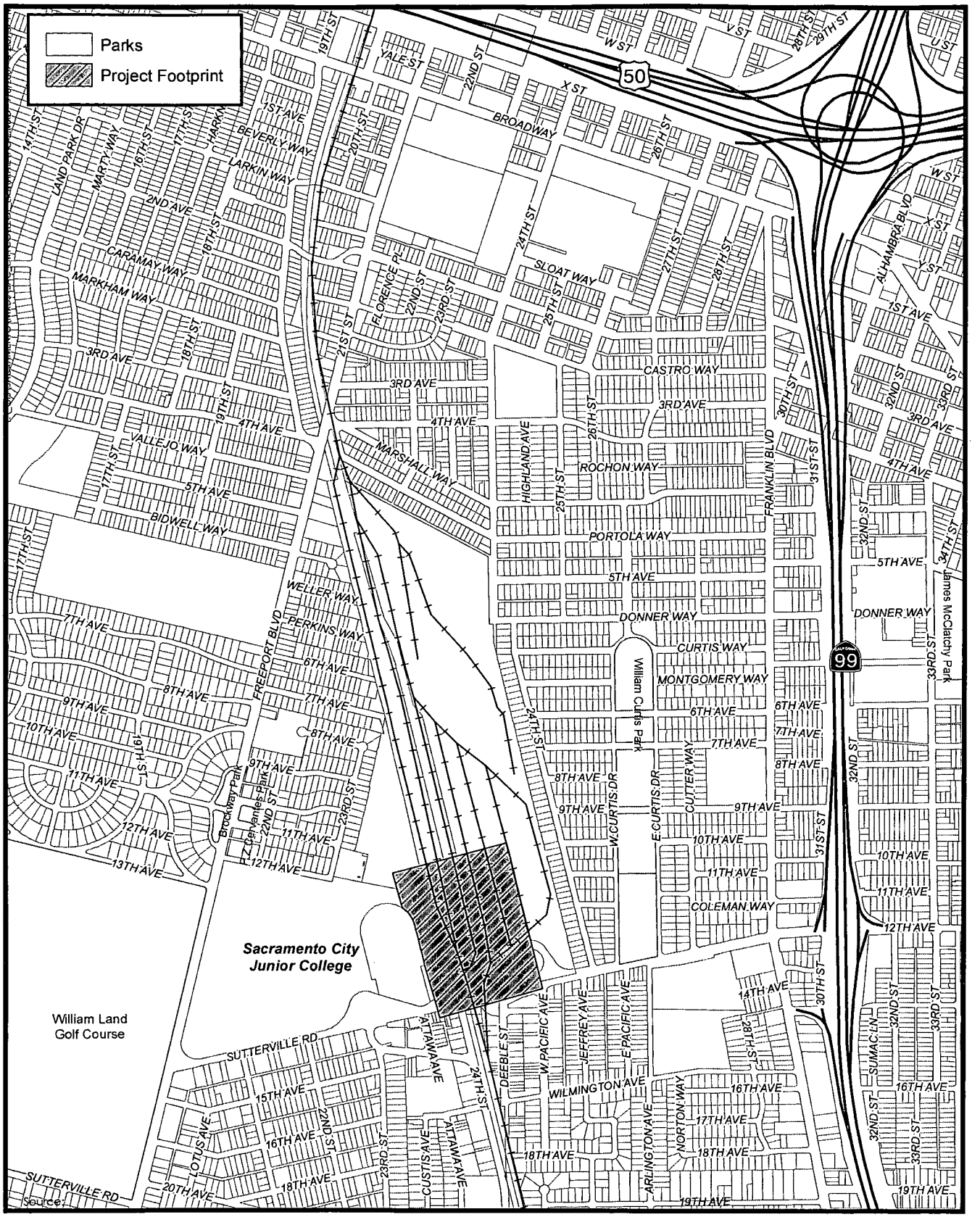


4 0 4
MILES

N

Figure 1
Regional Location Map

PMC

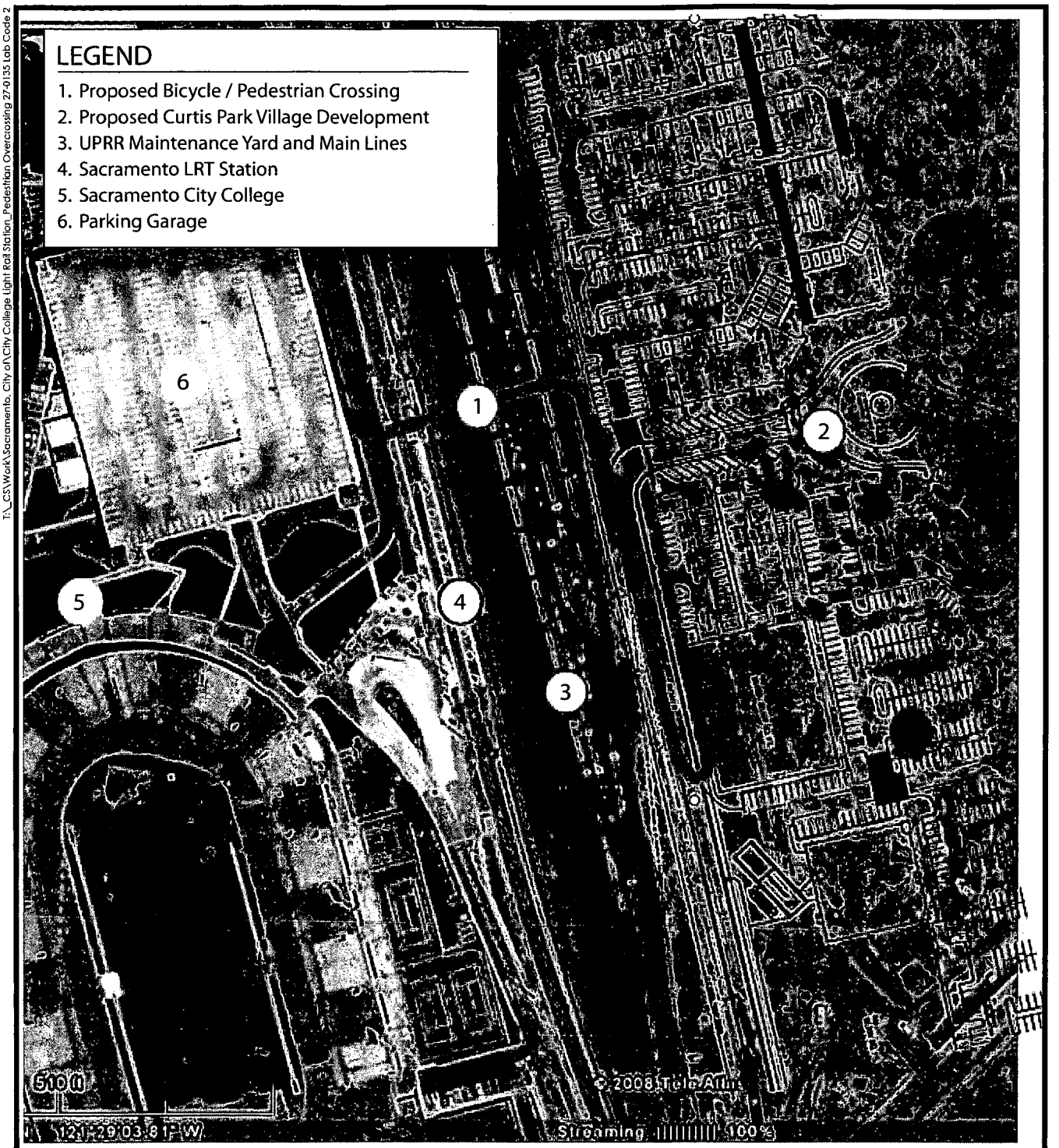


500 0 500
FEET
N

Figure 2
Project Location Map

PMC

T:_CS\Work\Sacramento, City of\City College Light Rail Station_Pedestrian Overcrossing 27-0135 Lab Code 2



Source: LAN Engineering, 2008

Figure 3
Project Footprint

PMC®

2.5 PROJECT CONSTRUCTION

Project construction is anticipated to begin in 2010.

2.6 REQUIRED PROJECT APPROVALS/ACTIONS

In order for the project to be implemented, a series of actions and approvals would be required from various public agencies. Anticipated project approvals/actions would include, but are not limited to, the following:

- Sacramento City Council – Adoption of the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program and other actions associated with project approval.
- California Department of Transportation (Caltrans) – Issuance of a Categorical Exclusion for the project pursuant to the requirements of NEPA, under the delegated authority of FHWA.
- Los Rios Community College District – Transfer of right-of-way to City of Sacramento to accommodate the proposed project.
- Union Pacific Railroad – Transfer of right-of-way to City of Sacramento to accommodate the proposed project.

2.7 OTHER PROJECT ASSUMPTIONS

The document assumes compliance with all applicable state, federal, and local codes and regulations including, but not limited to, City of Sacramento Building Code, the State Health and Safety Code, and the State Public Resources Code.

2.8 TECHNICAL STUDIES

The following technical studies were prepared in support of this IS/MND:

- Historic Property Survey Report, PMC, September 2008.
- Archaeological Survey Report, PMC, September 2008.
- Minimal Impact Natural Environmental Study, PMC, September 2008.
- Initial Site Assessment, Blackburn Consulting, December 2007.
- Visual Impact Assessment, PMC, October 2008.

These technical studies are available for viewing during normal business hours (Monday through Friday, 8:00 a.m. to 5:00 p.m., except holidays) at the City of Sacramento Development Services located at 300 Richards Boulevard, Third Floor, Sacramento, CA.

3.0 Initial Study Checklist

The environmental factors checked below would be potentially affected by the proposed project as indicated by the checklist on the following pages.

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

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 project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

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

Scott Johnson — July 9, 2009

Signature — Date

Scott Johnson, Environmental Planner — **City of Sacramento**

Printed Name — For

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

ENVIRONMENTAL SETTING

The project area is located north of Sutterville Road between Freeport Boulevard and 24th Street, adjacent to Sacramento City College. The light rail transit (LRT) and Union Pacific Railroad (UPRR) tracks are located just east of the college. Land between the tracks and 24th Street, once the location of a rail yard, is now primarily open space characterized by disturbed vegetation. Just east of this open land are single-family residences along the west side of 24th Street. Sutterville Road, near the project area, is a grade-separated roadway with the tracks at ground level below. No significant trees or other aesthetic resources were observed within the project area. From the Sutterville Road overcrossing, looking north beyond the project area, there are scattered views of the downtown Sacramento area in the distance.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts on aesthetic resources are considered significant if the proposed project would:

- Cast glare in such a way as to cause public hazard or annoyance for a sustained period of time; or
- Cast light onto oncoming traffic or residential uses.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed urban design and visual resources (see Draft MEIR, Chapter 6, pages 6.13-16 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City ultimately determined that aesthetic impacts associated with development consistent with the 2030 General Plan, including glare and nighttime lighting, would be a potentially significant cumulative impact. Implementation of the goals and policies set forth in the 2030 General Plan and mitigation measures set forth in the 2030 General Plan Master EIR would reduce these impacts to a less than significant level. The discussion of Urban Design and Visual Resources in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

No Impact. The visual characteristics of the project site include urban developed areas and ruderal (non-native) grassland. The project is located on flat terrain, and views in the project area include distant views of the tall buildings of the Central City area of Sacramento to the north, views of the Sutterville Road overcrossing to the south, views of portions of residential neighborhoods to the east, and views of the UPRR/Light Rail tracks and the Sacramento City College campus to the west. There are no scenic vistas within the vicinity of the proposed project site.

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

No Impact. State Route 99 (SR 99) is approximately 0.75 mile to the east, however, is not designated as a state scenic highway (Caltrans, 2007) or is it visible from the project site. Additionally, no other scenic resources, such as rock outcroppings, trees, or historic buildings exist within or near the project area.

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

Temporary Construction Impacts

Less Than Significant With Mitigation Incorporated. During construction of the project, there would be temporary visual impacts associated with on-site storage of construction materials and debris, movement of soil, and other construction activities that would be visible to viewers in the area, though to varying degrees depending on the phase of construction.

Some nighttime work may occur, and construction lighting would be required for these activities. This lighting could result in "spillover" lighting, which is defined as artificial lighting that spills over onto adjacent properties. Spillover lighting could be disturbing to drivers passing by these construction activities.

Temporary construction impacts would be considered moderate and mitigation is recommended to reduce the level of impacts.

Mitigation Measures

MM 3.1.1 Wherever feasible, construction materials and debris should be stored away from highly-visible areas, which shall include, but not be limited to, the highly-traveled Sacramento City College campus facilities, such as Hughes Stadium.

Timing: *Throughout project construction.*

Implementation: *City of Sacramento Department of Transportation.*

MM 3.1.2 Construction lighting should be faced downward and away from traffic lanes and areas where lighting could disturb passing drivers and/or pedestrians.

Timing: *Throughout project construction.*

Implementation: *City of Sacramento Department of Transportation.*

Overcrossing Structure Profile

Less Than Significant With Mitigation Incorporated. The proposed overcrossing structure would begin just east of the Sacramento City College campus, and would span across the UPRR/Light Rail tracks before touching down at the open space (former rail yard) area. At its highest, the overcrossing structure would be approximately 38 feet in height, with an additional 8-foot fence on top of that. In addition, approach ramps would be constructed that would slope from ground level to the height of the overcrossing structure.

The proposed overcrossing structure would create a new visually dominant feature in the area. The structure would be moderately visible from the Sutterville Road overcrossing as viewers pass by the area while traveling on Sutterville Road, although exposure would be brief. The structure would also be moderately visible from the Sacramento City College campus, with views from areas of campus closest to the structure, such as the parking garage, being most visible.

Although the new bicycle/pedestrian overcrossing would be moderately visible from the Sutterville Road overcrossing, viewer response from this viewpoint is anticipated to be low due to the short duration of exposure. Views of the overcrossing from Sacramento City College would be intermittent depending on a given viewer's location on campus; however, viewer response would be considered moderate due to the transient nature of views as viewers travel across campus. Therefore, impacts resulting from the new overcrossing profile and alignment are considered moderate and mitigation is recommended.

Mitigation Measures

MM 3.1.3 Design features should be incorporated, where feasible, to soften the visual appearance of the overcrossing structure and to blend into the surrounding visual setting. This may be accomplished using landscaping techniques and aesthetic treatments on the hardscape elements of the project. Where feasible, the following options should be studied and implemented:

- Incorporating planting as a component of project design; and
- Using stamped concrete or other aesthetics treatments on hard structures.

Timing: *During final design.*

Implementation: *City of Sacramento Department of Transportation.*

MM 3.1.4 The railing, fencing, and lighting design for the project should be chosen to incorporate features that are consistent with City policies and that meet the desired visual character of the area.

Timing: *During final design.*

Implementation: *City of Sacramento Department of Transportation.*

With implementation of recommended mitigation measures, visual impacts would be reduced to a **less than significant** level.

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

Less Than Significant With Mitigation Incorporated. The main source of daytime glare in the area is from sunlight reflecting from structures with reflective surfaces such as windows. Building materials (i.e., reflective glass and polished surfaces) are the most substantial sources of glare. The amount of glare depends on the intensity and direction of sunlight, which is more acute at sunrise and sunset because the angle of the sun is lower during these times.

A source of glare during the nighttime hours is artificial light. The sources of new and increased nighttime lighting and illumination include, but are not limited to, new residential developments, lighting from non-residential uses, lights associated with vehicular travel (i.e., car headlights), street lighting, parking lot lights, and security-related lighting for non-residential uses. Implementation of the project would introduce new sources of nighttime lighting and illumination levels in the project area.

Lighting poles would be installed on the overcrossing structure. During the daytime, reflection off of these poles could add to daytime glare in the area. At night, because the lighting would be higher than the structure itself, this lighting could result in "spillover" lighting.

Daytime and nighttime glare from overcrossing lighting would be highest at the Sacramento City College campus, where spillover lighting could result in additional nighttime lighting on the campus facilities, although nighttime lighting on a college campus is typically considered a security benefit and would not be considered a nuisance to nighttime users of the campus. Lighting impacts would be considered low to moderate and mitigation is recommended.

Mitigation Measures

MM 3.1.5 Lighting poles and signs should be designed to minimize reflection to the extent feasible. All surfaces should be painted with an anti-reflective coating or otherwise treated to reduce light reflection.

Timing: *During final design.*

Implementation: *City of Sacramento Department of Transportation.*

With implementation of recommended mitigation measures, visual impacts from light and glare would be reduced and visual impacts would be considered **less than significant**.

FINDINGS

All additional potentially significant environmental effects of the project related to aesthetics can be mitigated to a less than significant level.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.2 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed project is located in an urban area. According to the City of Sacramento Zoning Map, updated November 2008, designated land uses in the project area include Sacramento City College to the west, commercial and residential to the east, and industrial and commercial south of Sutterville Road. Immediately adjacent to the north and east is the planned Curtis Park Village development, which will include residential and commercial land uses. Further east of the project area is the established Curtis Park residential neighborhood. According to the Sacramento County Important Farmland Map, the project area and surrounding vicinity is designated as "Urban and Built-Up Land" (Department of Conservation, 2006).

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts on agricultural resources are considered significant if the proposed project would:

- Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses, or premature conversion of Williamson Act contracts.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed agricultural resources (see Draft MEIR, Chapter 6, pages 6.2-11 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards

Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City ultimately determined that with implementation of the policies set forth in the Sacramento 2030 General Plan, agricultural impacts associated with development consistent with the 2030 General Plan, including conversion of farmland and Williamson Act contracts, would be a less than significant cumulative impact. The discussion of agricultural resources in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

No Impact. The proposed project would take place east of Sacramento City College between Freeport Boulevard and 24th Street, just north of Sutterville Road. According to the Sacramento County Important Farmland Map, the project area and surrounding vicinity is designated as "Urban and Built-Up Land" (Department of Conservation, 2006). No agricultural activity occurs in the vicinity of the proposed project area.

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

No Impact. Refer to discussion a) above. There are no parcels in the project site zoned for agricultural use or under Williamson Act contract. Furthermore, there are no agricultural activities taking place within the project vicinity.

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

No Impact. Refer to discussions a) and b) above. The proposed project would not convert agricultural land to non-agricultural uses.

FINDINGS

The project would have no additional project-specific environmental effects related to agricultural resources.

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

ENVIRONMENTAL SETTING

Regional Setting

The proposed project is located within the Sacramento Valley Air Basin (SVAB), which consists of nine counties or portions of counties stretching from Plumas County in the north to Mariposa County in the south. The San Francisco Bay Area Air Basin lies to the west, and the San Joaquin Valley Air Basin is located to the south. The Sierra Nevada Mountain Range surrounds Sacramento County to the east and the Coastal Range towards the west. These mountain ranges direct air circulation and dispersion patterns. Temperature inversions can trap air within the Valley, thereby preventing the vertical dispersal of air pollutants.

Light winds and atmospheric stability provide frequent opportunities for pollutants to accumulate in the atmosphere. Wind speed and direction also play an important role in the dispersion and transport of air pollutants. Wind at the surface and aloft can disperse pollution by mixing vertically and by transporting it to other locations. The prevailing winds during the summer are from the north and west. These winds, known as "up-valley winds," originate with coastal breezes that enter the Valley through breaks in the coastal ranges, particularly through the Carquinez Straits in the San Francisco Bay Area.

Ozone, which is classified as a "regional" pollutant, often affects areas downwind of the original source of precursor emissions. Ozone can be easily transported by winds from a source area.

Winds from the west transport ozone from the Bay Area to the Sacramento Valley Air Basin. Ozone precursor transport depends on daily meteorological conditions.

Other primary pollutants, carbon monoxide (CO), for example, may form high concentrations when wind speed is low. During the winter, Sacramento County experiences cold temperatures and calm conditions that increase the likelihood of a climate conducive to high localized CO concentrations.

Surface radiant cooling can also cause temperature inversions. On clear winter nights, the ground loses heat at a rapid rate, causing air in contact with it to cool. Once formed, radiation inversions are similar to subsidence inversions with respect to their effects on pollutant dilution. As a result, conditions in Sacramento County are conducive to the containment of air pollutants. Air Pollution Sources and Current Air Quality

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for the management of air pollutant emissions. The District regulates air quality through its permit authority for most types of stationary emission sources, and through its planning and review activities for other sources.

Federal and California ambient air quality standards have been established for the following five critical pollutants: nitrogen dioxide, sulfur dioxide, particulate, carbon monoxide, and ozone. Ozone pollution is the most conspicuous type of air pollution and is often characterized by visibility-reducing haze, eye irritation, and high oxidant concentrations (i.e., "smog"). Ozone is a pollutant of particular concern in the Sacramento Valley.

Particulate matter is another pollutant of concern in the Sacramento Valley. Particulate matter of less than 10 microns in diameter, commonly called PM_{10}, and less than 2.5 microns in diameter, commonly called $PM_{2.5}$, refers to substances that can be inhaled into the lungs and can potentially cause serious health problems. Common sources of particulate matter include construction and demolition activities, agricultural operations, burning, and traffic.

In general, there are four major sources of air pollutant emissions in the Sacramento Valley Air Basin including motor vehicles, industrial plants, agricultural activities, and construction activities. Motor vehicles account for a significant portion of regional gaseous and particulate emissions. Local large employers, such as industrial plants, can also generate substantial regional gaseous and particulate emissions. In addition, construction and agricultural activities can generate significant temporary gaseous and particulate emissions (dust, ash, smoke, etc.).

Applicable Federal and State standards for each regulated pollution category are provided below in **Table 3.3.1**. The applicable standard for each pollution category, for environmental documentation purposes (i.e., identification of significant impacts), is whichever is most stringent of the Federal or State standards. Based on existing monitoring data located nearest the project site, Sacramento County is not in compliance with ozone or PM_{10} standards (SMAQMD).

TABLE 3.3.1
FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	State Standard	Federal Standard
Ozone (O_2)	1-Hour	0.09 ppm	–
	8-Hour	0.07 ppm	0.075 ppm
PM_{10}	24-Hour	50 $\mu g/m^3$	150 $\mu g/m^3$
	Annual	20 $\mu g/m^3$	–
$PM_{2.5}$	24-Hour	–	35 $\mu g/m^3$
	Annual	12 $\mu g/m^3$	15 $\mu g/m^3$
Carbon Monoxide (CO)	8-Hour	9.0 ppm	9 ppm
	1-Hour	20 ppm	35 ppm
Nitrogen Dioxide (NO_2)	Annual	0.03 ppm	0.053 ppm
	1-Hour	0.18 ppm	–
Sulfur Dioxide (SO_2)	Annual	–	0.030 ppm
	24-Hour	0.04 ppm	0.14 ppm
	3-Hour	–	–
	1-Hour	0.25 ppm	–
Lead	30-Day Avg.	1.5 $\mu g/m^3$	–
	Calendar Quarter	–	1.5 $\mu g/m^3$

ppm = parts per million
µg/m3 = Micrograms per Cubic Meter
Source: California Air Resource Board Ambient Air Quality Standards Chart, 6/26/08.

Ozone Emissions

The most severe air quality problem in the Sacramento Air Basin is the high level of ozone. Ozone can cause eye irritation and impair respiratory functions. Accumulations of ozone depend heavily on weather patterns and thus vary substantially from year to year. Ozone is produced in the atmosphere through photochemical reactions involving reactive organic compounds (ROG) and nitrogen oxides (NO_X). Numerous small sources throughout the region are responsible for most of the ROG and NO_X emissions in the Basin. Currently, Sacramento County is in non-attainment status for State and Federal ozone standards.

Suspended PM10 Emissions

PM_{10} refers to particulate matter less than 10 microns in diameter (those that can be inhaled and cause health effects). Common sources of particulate include demolition, construction activity, agricultural operations, traffic and other localized sources such as fireplaces. Very small particulate of certain substances can cause direct lung damage or can contain absorbed gases that may be harmful when inhaled. Particulate can also damage materials and reduce visibility. Currently, Sacramento County is in non-attainment status for State and Federal PM_{10} standards.

Carbon Monoxide (CO)

Because CO is emitted primarily by motor vehicles and is non-reactive, ambient CO concentrations normally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are also influenced by meteorological factors such as wind speed and atmospheric mixing. High levels of CO can impair the transport of oxygen in the bloodstream and thereby aggravate cardiovascular disease and cause fatigue, headaches, and dizziness. The standards for CO are being met in the Sacramento Air Basin and the SMAQMD does not expect that the standards will be exceeded in the near future.

Nitrogen Dioxide (NO2)

The major sources of nitrogen dioxide (NO_2), essential to the formation of photochemical smog, are vehicular, residential, and industrial fuel combustion. NO_2 is the "whiskey brown" colored gas evident during periods of heavy air pollution. NO_2 increases respiratory disease and irritation and may reduce resistance to certain infections. The standards for NO_2 are being met in the Sacramento Air Basin and the SMAQMD does not expect that the standards will be exceeded in the near future.

Sulfur Dioxide (SO2)

The major source of sulfur dioxide (SO_2) is the combustion of high-sulfur fuels for electricity generation, petroleum refining, and shipping. In humid atmospheres, sulfur oxides can react with vapor to produce sulfuric acid, a component of acid rain. SO_2 can irritate the lungs, damage vegetation and materials, and reduce visibility. The standards for SO_2 are being met in the Sacramento Air Basin and the SMAQMD does not expect that the standards will be exceeded in the near future.

Lead (Pb)

Gasoline-powered automobile engines are a major source of airborne lead, although the use of leaded fuel is being reduced. Lead can cause blood effects such as anemia and the inhibition of enzymes involved in blood synthesis. Lead may also affect the central nervous and reproductive systems. Ambient lead levels have dropped dramatically as the percentage of motor vehicles using unleaded gasoline continues to increase. The standards for lead are being met in the Sacramento Air Basin and the SMAQMD does not expect that the standards will be exceeded in the future.

Toxic Air Contaminants (TACs)

There are many different types of Toxic Air Contaminants (TACs), with varying degrees of toxicity. Diesel exhaust is a TAC of growing concern in California. The California Air Resources Board (CARB) in 1998 identified diesel engine particulate matter as a TAC. The exhaust from diesel engines contains hundreds of different gaseous and particulate components, many of which are toxic. Many of these compounds adhere to the particles, and because diesel particles are so small, they penetrate deep into the lungs.

Diesel engine particulate has been identified as a human carcinogen. The health effects of TACs include cancer, birth defects, neurological damage and death. Mobile sources, such as trucks, buses, automobiles, trains, ships and farm equipment are by far the largest source of diesel emissions.

Air Quality Standards

Federal

The 1977 Federal Clean Air Act (CAA) required the U.S. Environmental Protection Agency (EPA) to identify National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for the six criteria air pollutants (these are included in **Table 3.3.1**). Pursuant to the 1990 amendments to the Federal CAA, the EPA has classified air basins (or portions thereof) as either "attainment" or "non-attainment" for each criteria air pollutant, based on whether or not the NAAQS have been achieved.

State

In 1988, the State of California passed the California Clean Air Act (CCAA, State 1988 Statutes, Chapter 1568), which established more stringent State ambient air quality standards and set forth a program for their achievement. The California Air Resources Board (CARB) establishes state air basins and implements state ambient air quality standards (AAQS), as required in the CCAA, and cooperates with the Federal government in implementing pertinent sections of the Federal Clean Air Bill Amendments. Further, CARB is responsible for controlling stationary and mobile source air pollutant emissions throughout the State. Like its Federal counterpart, the CCAA designates areas as attainment or non-attainment, with respect to the state AAQS.

Sacramento County is in the CARB-designated Sacramento Valley Air Basin (SVAB). In addition to Sacramento County, the SVAB includes Yolo and Solano Counties to the west, and eight other counties to the north and east.

Regional

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within Sacramento County and throughout the Sacramento Valley Air Basin. The District is also responsible for monitoring air quality and setting and enforcing limits for source emissions. CARB is the agency with the legal responsibility for regulating mobile source emissions. The District is precluded from such activities under State law. The SMAQMD is the agency responsible for preparing regional air quality plans under the State and Federal CAA. The current regional clean air plan addresses ozone and PM_{10} and identifies strategies for progressive reduction in emissions of ozone precursors and particulate matter.

Under the State standards, Sacramento County is in "Non-Attainment" for ozone, PM_{10}, and $PM_{2.5}$ and in "Attainment" or "Unclassified" for other criteria pollutants. Sacramento County is also in "Non-Attainment" for Federal ozone and PM_{10} standards, but is considered in "Attainment" or "Unclassified" for other Federal criteria pollutants.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts on air quality are considered significant if the proposed project would:

- Conflict with or obstruct implementation of an applicable air quality plan.

In the Sacramento Federal Ozone Nonattainment Area, the *Rate of Progress Plan* has been adopted and the *2011 Reasonable Further Progress Plan* is being considered for adoption, both

to address attainment of the federal 8-hour ozone standard. Similarly, the *2003 Triennial Report* and the *2006 Annual Progress Report* address attainment of the State ozone standard. The SMAQMD considers that any development project or plan with the following emissions of ozone precursors, nitrogen oxide (NO_x) and reactive organic gases (ROG) would represent a significant conflict or obstruction to the success of the regional ozone attainment plans:

- Short-term (construction) emissions of NO_x above 85 pounds per day;
- Long-term (operational) emissions of NO_x or ROG above 65 pounds per day; or
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Current violations of the federal and state 10-micron particulate (PM_{10}) standards are being recorded at Sacramento monitoring stations. There is evidence of federal and state carbon monoxide (CO) standard violations at Sacramento monitoring stations in the recent past. The SMAQMD considers that the following concentrations of PM_{10} and CO would represent a significant violation of these ambient air quality standards:

- PM_{10} concentrations equal to or greater than five percent of the state ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard. Further, the SMAQMD holds that if project/plan emissions of NO_x and ROG are below the emission thresholds given above, then the project/plan would not threaten violations of the PM_{10} ambient air quality standards;
- CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm); or
- Expose sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs for mobile sources; or
- The project results in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment under an applicable federal or state ambient air quality standard (including the release of emissions that exceed quantitative thresholds for ozone precursors).

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed air quality and greenhouse gas emissions (see Draft MEIR, Chapter 6, pages 6.1-7 et seq. and Chapter 8, Climate Change). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City ultimately determined that air quality and greenhouse gas emissions impacts associated with development consistent with the 2030 General Plan, including construction/operation emissions, ozone precursor emissions, and violations of air quality standards, would be a significant and unavoidable cumulative impact. The discussion of air quality in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

No Impact. The proposed project would not result in increased vehicle use, increases in population, or result in a change in overall Vehicle Miles Traveled (VMT) that would conflict with the projections used for development of regional air quality attainment plans. Instead, the project should result in slight decreases in vehicle use for the general vicinity by providing improved localized and safe travel to and from Sacramento City College, the light rail station, and the approved Curtis Park Village development. Operation of the proposed project would not obstruct implementation of any of the proposed control measures contained in regional air quality plans. As a result, there would be no impact.

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

Less Than Significant Impact. The proposed project would not result in operational activities that would generate or contribute to air quality emissions. The project would generate construction-related emissions, which are short-term and of temporary duration, lasting only as long as construction activities occur, but possess the potential to represent a significant air quality impact. The SMAQMD recommends that construction-generated emissions of ozone precursor pollutants (i.e., ROG and NO_X) be quantified and presented as part of the analysis of project-generated emissions. However, construction equipment emits relatively low levels of ROG and emissions from construction processes (e.g., asphalt paving, architectural coatings) are typically regulated by the SMAQMD. As a result, the SMAQMD has not adopted a construction emissions threshold for ROG. The SMAQMD has, however, adopted a construction emissions threshold of 85 lbs/day for NO_X.

The SMAQMD Road Construction Emissions Model, Version 6.3.1, was used to quantify the predicted emissions of air pollutants that would result as part of the project. **Appendix A** includes the full model inputs and results. **Table 3.3.2** below shows the modeled construction emissions resulting from project implementation:

TABLE 3.3.2
CONSTRUCTION AIR POLLUTION EMISSION

Emission Estimates for ->	Sacramento City College Pedestrian/Bicycle Overcrossing			Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO_2 (lbs/day)
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM_{10} (lbs/day)			$PM_{2.5}$ (lbs/day)			
Grubbing/Land Clearing	8.4	41.3	77.6	58.2	3.2	55.0	14.4	3.0	11.4	6,549.9
Grading/Excavation	9.3	40.8	77.6	58.9	3.9	55.0	15.0	3.6	11.4	6,886.9
Drainage/Utilities/ Sub-Grade	5.3	20.9	40.4	57.3	2.3	55.0	13.5	2.1	11.4	3,331.3
Paving	6.1	18.6	34.1	3.0	3.0	-	2.7	2.7	-	2,650.1
Maximum (pounds/day)	9.3	41.3	77.6	58.9	3.9	55.0	15.0	3.6	11.4	6,886.9
Total (tons/ construction project)	1.0	4.3	8.2	6.6	0.4	6.2	1.7	0.4	1.3	710.0

Notes:
Project Start Year = 2009
Project Length (months) = 12
Total Project Area (acres) = 6
Maximum Area Disturbed per Day (acres) = 6
Total Soil Imported/Exported (yd^3/day) = 40

PM_{10} and $PM_{2.5}$ estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

While construction of the proposed overcrossing would result in the temporary generation of emissions resulting from site grading and excavation, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces, emissions would not exceed the SMAQMD's significance threshold for NOx of 85 lbs/day. As a result, short-term increases of construction-generated NOx and other criteria pollutants would be considered less than significant.

c) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

Less Than Significant Impact. The proposed project would result in construction of a pedestrian/bicycle overcrossing that would extend from the light rail transit (LRT) station at Sacramento City College to the existing and proposed neighborhoods east of the Union Pacific Railroad (UPRR) tracks. The overcrossing would allow for safe pedestrian and bicycle movement across the tracks. The pollutant increase associated with construction activities would be temporary and would be at less than significant levels under SMAQMD guidelines. Although the project would generate short-term air quality impacts, long-term or cumulatively considerable increases in emissions would not occur, as the project would not include any traffic generating features.

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

Less than Significant Impact. Particulate exhaust emissions from diesel-fueled engines (Diesel Particulate Matter or DPM) were identified as a toxic air contaminant (TAC) by the CARB in 1998. Implementation of the proposed project would result in short-term emissions of DPM during construction associated with the use of off-road diesel equipment for site grading and excavation, and other construction activities. Health-related risks associated with diesel-exhaust emissions are primarily associated with long-term exposure and associated risk of contracting cancer. For residential land uses, the calculation of cancer risk associated with exposure to TACs are typically calculated based on a 70-year period of exposure.

Sensitive receptors are typically facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. Examples of these receptors are schools, retirement homes, convalescent homes, hospitals, and medical clinics. Sensitive receptors near the project site are students attending Sacramento City College football field and campus, located west of the project, and existing residences approximately 600 feet east of the project.

Given that diesel-exhaust fumes would be intermittent, short-term in nature, and would dissipate rapidly from the construction area, it is not anticipated that construction activities would expose sensitive receptors to high pollutant concentrations.

Exposure to TACs from diesel train exhaust by users of the overcrossing would also occur during project operation; however this exposure would be brief and intermittent and depend on frequency of use and actual train operations. It is not anticipated that periodic brief exposure from passing diesel trains by users of the overcrossing would expose them to substantial amounts of TACs that would result in increased risk of negative health effects. Therefore, impacts associated with long-term health risks would be considered less than significant.

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

Less than Significant Impact. Construction activities would involve the use of a variety of gasoline or diesel-powered equipment that emit exhaust fumes. Equipment emissions would occur intermittently throughout the workday and the exhaust odors are expected to dissipate rapidly within the immediate vicinity of the equipment. Residents, employees, and students who live, work, or pass by the construction site may find these odors objectionable; however the infrequency of the emissions, rapid dissipation of the exhaust into the air, and short-term nature of the construction activities would result in objectionable odors being a less than significant impact.

f) *Interfere with or impede the City's efforts to reduce greenhouse gas emissions?*

No Impact. The City shall reduce greenhouse gas emissions from new development by discouraging auto-dependent sprawl and dependence on the private automobile; promoting water conservation and recycling; promoting development that is compact, mixed-use, pedestrian-friendly, and transit-oriented; promoting energy-efficient building design and site planning; improving the jobs/housing ratio in each community; and other methods of reducing emissions.

The proposed project will generate Greenhouse Gas (GHG) emissions during the construction phase. The total tons of carbon dioxide (CO_2) that will be produced during the construction of this project are 710.0. Emissions will be short-term and will account for

a fraction of total GHG emissions in California each year. No significant effect would be caused by the project, since the objective of this project is to improve safety and provide alternative access for pedestrians and bicyclists to and from Sacramento City College. The project will not conflict with the City's efforts to reduce GHGs, but is furthering its efforts by not contributing to urban sprawl and encouraging a pedestrian and bicycle friendly community.

FINDINGS.

The project would have no additional project-specific environmental effects related to air quality and greenhouse gas emissions.

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

ENVIRONMENTAL SETTING

A biological resources report was completed for the project in September 2008. To support completion of the report, a pedestrian reconnaissance-level survey was conducted by a qualified biologist of the project study area (PSA) on September 4, 2007. Major vegetation, habitat types, and observed animals were noted, mapped, and evaluated. The biological evaluation included surveys for listed species and their habitat, and riparian habitat within the project area. Particular attention was focused upon potential special-status species and their habitats.

Prior to the site visit a background information search for potential special-status species was conducted utilizing the California Department of Fish and Game's (CDFG) California Natural

Diversity Data Base (CNDDB) (CDFG 2007a), CNDDB QuickViewer for unprocessed data (CDFG 2007b), U.S. Fish and Wildlife Service (USFWS 2007), and California Native Plant Society online species list (CNPS 2007). Supplemental information searches of the CNDDB, USFWS and California Native Plant Society (CNPS) databases were conducted in July 2008 to verify no new incidents of special-status species in or near the project area.

Vegetation

The project study area can be characterized as ruderal or disturbed grassland. Vegetation within the project study area primarily consists of weedy flora such as yellow star thistle (*Centaurea solstitialis*), Italian rygrass (*Lolium multiflorum*), wild oat (*Avena fatua*), vetch (*Vicia villosa*), filaree (*Erodium botrys*), Bermuda grass (*Cynodon dactylon*), as well as other common grasses and forbes. West of the railroad tracks, outside of the project footprint, is some formal landscaping with lawn, ornamental trees, and shrubs associated with the new parking lot structure and light rail station. Wetlands and significant trees were not found within or surrounding the project study area.

Wildlife

The habitat within the project study is not suitable for any special-status wildlife species identified from the database searches as potentially occurring within the project area. No special-status animal species were observed during the survey; however no species-specific surveys were conducted. Wildlife species observed during the site survey include rock pigeon (*Columba livia*), house sparrow (*Passer domesticus*), and mourning dove (*Zenaida macroura*).

Special-Status Species

Special-status species are commonly characterized as species that are at potential risk or actual risk to their persistence in a given area or across their native habitat (locally, regionally, or nationally) and are identified by a state and/or federal resource agency as such. These agencies include governmental agencies such as, California Department of Fish and Game (CDFG) and U.S. Fish and Wildlife Service (USFWS), or private organizations such as the California Native Plant Society (CNPS). The degree to which a species is at risk of extinction is the limiting factor on a species status designation. Risk factors to a species' persistence or population's persistence include: habitat loss, increased mortality factors (take, electrocution, etc.), invasive species, and environmental toxins.

In context of environmental review, special-status species are defined by the following codes:

- Species that are listed, proposed, or candidates for listing under the Federal Endangered Species Act (FESA) (50 CFR 17.11 – listed; 61 FR 7591, February 28, 1996 candidates)
- Species that are listed or proposed for listing under the California Endangered Species Act (CESA) (Fish and Game Code 1992 §2050 et seq.; 14 CCR §670.1 et seq.)
- Species that are designated as Species of Special Concern by CDFG.
- Species that are designated as Fully Protected by CDFG (Fish and Game Code, §3511, §4700, §5050, §5515)
- Species that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) (14 CCR §15380)

Special-status plant and wildlife species were determined using a California Natural Diversity Database (CNDDB) (CNDDB 2007 and 2008), California Native Plant Society (CNPS 2008) nine-quadrangle search (CNPS 2007), and a United States Fish and Wildlife Service search (USFWS 2007 and 2008). Database searches were completed prior to a pedestrian reconnaissance-level survey conducted on September 4, 2007 and supplemented in August 2008 to verify no new incidents of special-status species had been identified in or near the project area. **Table 3.4.1** and **Table 3.4.2** list the special-status species that were identified in the database searches as having potential to occur in the project area. No special-status wildlife species were observed or expected to be present within or surrounding the project study area.

TABLE 3.4.1
SPECIAL-STATUS PLANT SPECIES POTENTIALLY OCCURRING IN THE SACRAMENTO CITY COLLEGE LIGHT RAIL STATION PEDESTRIAN OVERCROSSING PROJECT VICINITY

Species	Status Fed/State/ CNPS	Habitat	Flowering Period	Potential to Occur in the PSA
Ahart's dwarf rush *Juncus leiospernus* var. *ahartii*	–/–/1B	Restricted to the edges of vernal pools. 30-100 m.	Mar-May	No: Species not reported within 1 mile of the PSA; vernal pool habitat not present in PSA.
Boggs Lake hedge-hyssop *Gratiola heterosepala*	–/SE/1B	On clay soils, usually in vernal pools and sometimes on lake margins. 5-2400m.	Apr-Aug	No: Species not reported within 1 mile of the PSA; vernal pool habitat not present in PSA.
Dwarf downingia *Downingia pusilla*	–/–/2	Valley & foothill grassland (mesic sites), vernal pools. 1-485m.	Mar-May	No: Species not reported within 1 mile of the PSA; appropriate habitat not present in PSA.
Legenere *Legenere limosa*	–/–/1B	In beds of vernal pools. Many historical occurrences are extirpated. 1-880 m.	Apr-Jun	No: Species not reported within 1 mile of the PSA; vernal pool habitat not present in PSA.
Northern California black walnut *Juglans hindsii*	–/–/1B	Riparian forest, riparian woodland. Few extant stands remain; widely naturalized. Deep alluvial soil associated with a creek or stream. 0-395 m.	Apr-May	No: The species is not present in the PSA.
Sacramento Orcutt grass *Orcuttia viscida*	FE/SE/1B	In mudflow vernal pools with rocky bottoms, 30-100 m.	Apr-July	No: Species not reported within 1 mile of the PSA; vernal pool habitat not present in PSA.
Sanford's arrowhead *Sagittaria sanfordii*	–/–/1B	In standing or slow-moving freshwater ponds, marshes, and ditches. 0-610 m.	May-Oct	No: Species not reported within 1 mile of the PSA; vernal pool habitat not present in PSA.
Slender orcutt grass *Orcuttia tenuis*	FT/SE/1B	Growing in vernal pools. 30-1735m.	May-Sep	No: Species not reported within 1 mile of the PSA; vernal pool habitat not present in PSA.
Woolly rose-mallow *Hibiscus lasiocarpus*	–/–/2	Moist, freshwater-soaked river banks & low peat islands in sloughs; in CA, known from the Delta watershed. 0-150 m.	Jun-Sep	No: Species not reported within 1 mile of the PSA; vernal pool habitat not present in PSA.

Status	
Federal	
FE	Species Listed as Endangered by the Federal Endangered Species Act
FT	Species Listed as Threatened by the Federal Endangered Species Act
State	
SE	Species Listed as Endangered by the California Endangered Species Act
CNPS (California Native Plant Society)	
1A	Plant species that are presumes extinct in California
1B	Plant species that are rare, threatened or endangered in California and elsewhere
2	Plant species that are rare, threatened, or endangered in California, but are more common elsewhere

TABLE 3.4.2
SPECIAL-STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING IN THE SACRAMENTO CITY COLLEGE LIGHT RAIL STATION PEDESTRIAN OVERCROSSING PROJECT VICINITY

Species	Status Fed/State	Habitats	Potential for Occurrence in the PSA
INVERTEBRATES			
Conservancy fairy shrimp *Branchinecta conservatio*	FE/–	Endemic to grasslands of the northern two-thirds of the Central Valley. Inhabits astatic pools located in swales formed by old braided alluvium. Inhabits vernal pools and other seasonal freshwater wetlands.	No: Appropriate wetland habitat not present within the PSA. No CNDDB occurrences within 1 mile of PSA.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT/–	Riparian and oak savannah habitats with elderberry shrubs *(Sambucus* spp*)*.	No: Appropriate elderberry habitat does not occur within the PSA.
Vernal pool fairy shrimp *Branchinecta lynchi*	FT/–	Endemic to grasslands of Central Valley and Central Coast mountains. Inhabits vernal pools and other seasonal freshwater wetlands.	No: Appropriate wetland habitat not present within the PSA. No CNDDB occurrences within 1 mile of PSA.

Species	Status Fed/State	Habitats	Potential for Occurrence in the PSA
Vernal pool tadpole shrimp *Lepidurus packardi*	FE/–	Vernal pools and other seasonal freshwater wetlands.	No: Appropriate wetland habitat not present within the PSA. No CNDDB occurrences within 1 mile of PSA.
FISH			
Chinook salmon Central Valley spring-run ESU *Oncorhynchus tshawytscha*	FT/ST	Federal listing refers to populations spawning in the Sacramento River and its tributaries. Adult numbers depend on pool depth and volume, amount of cover and proximity to gravel. Water temperatures greater than 27 C are lethal to adults	No: Appropriate riverine habitat does not occur within the PSA.
Chinook salmon Central Valley winter-run ESU *Oncorhynchus tshawytscha*	FE/SE	Listing refers to populations spawning in the Sacramento River below Keswick Dam, but not in tributary streams. Requires clean, cold water over gravel beds with water temperatures between 6 C and 14 C for spawning.	No: Appropriate riverine habitat does not occur within the PSA.
Delta smelt *Hypomesus transpacificus*	FT/–	Restricted to the Sacramento/San Joaquin Delta; seasonally occurs in Suisun Bay, Carquinez Straight, and San Pablo Bay.	No: Appropriate Delta and bay habitat does not occur within the PSA.
Green sturgeon *Acipenser medirostris*	FT/CSD	Spawns in the Sacramento and Klamath Rivers.	No: Appropriate riverine habitat does not occur within the PSA.
Sacramento perch *Archoplites interruptus*	–/CSC	Historically found in the sloughs, slow-moving rivers and lakes of the Central Valley. Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of physio-chemical water conditions.	No: Appropriate aquatic habitat does not occur within the PSA.
Sacramento splittail *Pogonichthys macrolepidotus*	–/CSC	Endemic to the lakes and rivers of Central Valley, but now confined to the Delta, Suisun Bay, and associated marshes. Slow-moving river sections, dead-end sloughs. Requires flooded vegetation for spawning & foraging for young.	No: PSA outside of current species range; appropriate aquatic habitat does not occur within the PSA.
Steelhead Central Valley ESU *Oncorhynchus mykiss*	FT/–	Listing refers to populations in the Sacramento and San Joaquin rivers and their tributaries.	No: Appropriate riverine habitat does not occur within the PSA.

Species	Status Fed/State	Habitats	Potential for Occurrence in the PSA
AMPHIBIANS			
California red-legged frog *Rana aurora draytonii*	FT/CSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	No: Appropriate habitat requirements not present within the PSA. No CNDDB occurrences within 1 mile of PSA.
California tiger salamander *Ambystoma californiense*	FT/CSD	Typically found in annual grasslands of lower hills and valleys; breeds in temporary and permanent ponds and in streams; uses rodent burrows and other subterranean retreats in surrounding uplands for shelter; appears to be absent in waters containing predatory game fish.	No: Appropriate habitat requirements not present within the PSA. No CNDDB occurrences within 1 mile of PSA.
Western spadefoot toad *Spea hammondii*	–/CSC	Primarily grassland habitats, but can be found in valley to foothill hardwood woodlands. Vernal pools are essential for breeding and egg laying.	No: Habitat requirements not present within the PSA. No CNDDB occurrences within 1 mile of PSA..
REPTILES			
Giant garter snake *Thamnophis gigas*	FT/ST	Prefers freshwater marsh and low-gradient streams. Has adapted to drainage canals & irrigation ditches.	No: Species not reported from within 1 mile of PSA, and appropriate habitat does not occur within the PSA.
Northwestern pond turtle *Actinemys marmorata marmorata*	–/CSC	Associated with permanent or nearly permanent water in a wide variety of habitats; requires basking sites; nests may be up to 0.5 km from water.	No: Appropriate aquatic habitat does not occur within the PSA. No CNDDB occurrences within 1 mile of PSA.
BIRDS			
Burrowing owl *Athene cunicularia*	–/CSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	No: Species not reported from within 1 mile of PSA, and appropriate habitat does not occur within the PSA.

Species	Status Fed/State	Habitats	Potential for Occurrence in the PSA
Bank swallow *Riparia riparia*	–/ST	Colonial nester. Requires vertical banks or cliffs with fine-textured or sandy soils near streams, rivers, lakes or the ocean in which to dig nesting holes.	No: Appropriate vertical bank nesting habitat does not occur within the PSA. No CNDDB occurrences within 1 mile of PSA.
Purple martin *Progne subis*	–/CSC	Inhabits woodlands, low-elevation coniferous forest of Douglas-fir, ponderosa pine, & Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.	No: CNDDB reports one occurrence on the Sutterville Road overcrossing above the UPRR rail yard. This location is outside of the PSA, and more than 1,300 feet from the project construction footprint, and not likely to be impacted by project construction or operations.
Swainson's hawk *Buteo swainsoni*	–/ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	No: Appropriate breeding and foraging habitat are not found within the PSA. No CNDDB occurrences within 1 mile of PSA.
Tricolored blackbird *Agelaius tricolor*	–/CSC	Highly colonial species. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	No: Appropriate wetland nesting habitat does not occur within the PSA.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FC/–	Nests along broad, lower flood bottoms of larger river systems and riparian jungles of willow, often mixed with cottonwoods, with understory comprised of blackberry, nettles, or wild grape; no sightings in this area since 1987.	No: Appropriate riparian nesting habitat does not occur within the PSA. Species not reported from within 1 mile of PSA.
Raptors and Other Migratory Birds	MBTA and §3503.5 CDFG Code	Nest in a variety of communities including cismontane woodland, chaparral, riparian, and urban communities.	No: Trees within the PSA are not of significant height or structure to provide suitable nesting habitat, and inadequate onsite grasslands to provide suitable foraging habitat.

Species	Status Fed/State	Habitats	Potential for Occurrence in the PSA
MAMMALS			
American badger *Taxidea taxus*	–/CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Need sufficient food, friable soils & open, uncultivated ground. Prey on burrowing rodents. Dig burrows.	No: Species not reported from within 1 mile of PSA, and appropriate habitat does not occur within the PSA.

Status	
Federal	
FE	Species Listed as Endangered by the Federal Endangered Species Act
FT	Species Listed as Threatened by the Federal Endangered Species Act
ESU	Evolutionarily Significant Unit
MBTA	Migratory Bird Treaty Act
State	
SE	Species Listed as Endangered by the California Endangered Species Act
ST	Species Listed as Threatened by the California Endangered Species Act
CSC	Species of concern as identified under CDFG Code

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts on biological resources are considered significant if the proposed project would:

- Create a potential health hazard, or involve the use, production or disposal of materials that pose a hazard to plant or animal populations in the affected area;
- Result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of threatened or endangered species of plant or animal;
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands); or
- Violate the City's Heritage Tree Ordinance (City Code 12.64.040).

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed biological resources (see Draft MEIR, Chapter 6, pages 6.3-25 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City ultimately determined that biological impacts associated with development consistent with the 2030 General Plan would be a potentially significant cumulative impact. Compliance with federal and state regulations, implementation of the goals and policies in the Sacramento 2030 General Plan, and applicable mitigation measures would reduce cumulative biological impacts to a less than significant level. The discussion of biological resources in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

No Impact. The pedestrian survey of the project area determined that the project site has no suitable habitat for any special plant or animal species. Special-status plants and animals were not found within the project area. Therefore the project is not expected to affect any federal or state candidate, sensitive or special plant species because none are known to occur or are anticipated to occur at the project site.

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

No Impact. Sensitive habitats include those that are of special concern to resource agencies and those that are protected under CEQA, Section 1600 of the California Fish

and Game Code, or Section 404 of the Clean Water Act. No sensitive habitats or riparian habitats have been identified within or near the project area. Therefore; the project would have no impact on these resources.

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

No Impact. Construction activities associated with the overcrossing are not anticipated to impact protected wetlands, as none were identified within the project study area during the biological survey. Therefore, no net loss of waters of the U.S. or wetlands would occur due to implementation of the proposed project.

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

No Impact. There are no known wildlife corridors or native wildlife nursery sites within the project area. The site consists primarily of rail tracks, a maintenance yard, and disturbed vacant land, and is considered to have a low biological value. Additionally, no water resources are located within the project area; therefore, no suitable habitat was identified for resident, migratory, or wildlife fish species within the project area.

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

No Impact. The project area is disturbed and of low biological value. The City of Sacramento Municipal Code (Title 12, Chapter 12.64) gives trees with a circumference of 100 inches or more special protection under this policy. Additionally, select trees with a circumference of 36 inches or more are also protected. Protected trees, or trees of significant value, were not identified within the project area. Therefore, implementation of the proposed project would have no impact on any local policies or ordinances protecting biological resources.

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

No Impact. The City of Sacramento does not presently have an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan. Therefore, there would be no impact to these types of plans.

FINDINGS

The project would have no additional project-specific environmental effects related to biological resources.

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

ENVIRONMENTAL SETTING

A cultural resources record search was conducted by PMC Cultural Resources staff at the North Central Information Center at California State University, Sacramento on September 6, 2007. The search included the examination of topographic maps identifying surveys in and around the project area, as well as site locations within the vicinity. Additionally, a Sacred Lands Search request was sent to the Native American Heritage Commission on September 6, 2007. The project area is considered to be of low sensitivity regarding archaeological sites due to its location and previous disturbances, such as the construction of Sutterville Road to the south, the UPRR tracks and rail yard to the east, and Sacramento City College to the west.

Archaeological Resource Identification

The record search for the project showed the project area as not having been previously surveyed, but identified eight surveys within 0.5 mile of the project area. The record search did not identify any prehistoric or historic resources, including historic structures, but did note that portions of Sacramento City College, which is located adjacent to the project area, is considered a Historic District and is included on the National Register of Historic Places and California Register of Historic Resources. The project, however, will not disturb or encroach onto any historic structures associated with the Sacramento City College Historic District.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts on cultural resources are considered significant if the proposed project would:

- Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines section 15064.5.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed cultural resources (see Draft MEIR, Chapter 6, pages 6.4-22 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City ultimately determined that cultural resources impacts associated with development consistent with the 2030 General Plan would be a significant and unavoidable cumulative impact. The discussion of cultural resources in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

Less Than Significant Impact. Archeological and historical investigations did not identify any cultural resources (e.g., prehistoric sites, historic sites, or buildings) located within the project area that meet the CEQA criteria as presented in §15064.5. The Sacramento City Historic District, located on the Sacramento City College campus adjacent to the project area, includes historic structures, however, due to the distance of the proposed project in relation to the historic district structures, the project would not result in direct or indirect impacts to these or any other existing structure; therefore, the proposed project would have a less than significant impact on historical resources.

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

Less Than Significant With Mitigation Incorporated. As discussed above, there are no identified archaeological resources, as defined in §15064.5, located within the project area. Therefore, the proposed project would have no impact on an archaeological resource. However, it is possible that previously unanticipated archaeological resources could be discovered during project construction and mitigation is required.

Mitigation Measure

MM 3.5.1 Should a previously unidentified or unanticipated archaeological or paleontological resource or feature be discovered during project construction, the City shall be notified immediately and all construction in the vicinity must stop until a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology or a paleontologist evaluates the finds and recommends appropriate action, as defined in CEQA Guidelines §15064.5(f).

Timing: *Throughout groundbreaking activities and project construction.*

Implementation: *City of Sacramento Department of Transportation.*

Implementation of **MM 3.5.1** would ensure that impacts to archaeological resources are reduced to **less than significant.**

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

Less Than Significant With Mitigation Incorporated. There are no identified unique paleontological resources or sites, or unique geological features located within the project. Therefore, the proposed project should have no impact on a unique paleontological resource or site, or a unique geological feature. However, it is possible that previously unanticipated paleontological resources are discovered during project construction. Implementation of **MM 3.5.1** would ensure that impacts to these resources are minimized to a **less than significant** level.

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

Less Than Significant Impact. The proposed project would be subject to state law regarding the discovery and disturbance of human remains; therefore, potential impacts from the proposed project are considered less than significant.

Although it is not anticipated that any human remains would be encountered during construction of the proposed project, should any previously unidentified or unanticipated human remains be discovered during construction, all construction in the vicinity must stop and the County Coroner must be notified according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in CEQA Guidelines Section 15064.5 (d) and (e) shall be followed.

FINDINGS

All additional potentially significant environmental effects of the project related to cultural resources can be mitigated to a less than significant level.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.6 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 soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Regional & Project Geology

The proposed project site is located in a relatively flat area within the Great Valley geomorphic province in Central California. The filling of a large structural trough or downwarp of the underlying bedrock formed this province. The Great Valley is an elongate, northwest-trending structural trough situated between the Sierra Nevada Mountains on the east and the Coast and Cascade Ranges on the west. The Great Valley has been and is presently being filled with sediments primarily derived from the Sierra Nevada. The greatest depth of sediments lay along the eastern margin of the trough.

Faults and Seismicity

Sacramento County is less affected by seismic events and other geologic hazards than other portions of the state. Nevertheless, some property damage has occurred in the past. The damage that was experienced has largely been the result of major seismic events occurring in adjacent areas, especially the San Francisco Bay area and, to a lesser extent, the foothills of the Sierra Nevada Mountain Range. The areas of Sacramento County most vulnerable to seismic and geologic hazards are those areas subject to liquefaction, shaking, and subsidence. The Central Valley, like most of California, is a seismically active region.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts resulting from geologic or soil conditions are considered significant if the proposed project would:

- Introduce either geologic or seismic hazards by allowing the construction of the project on a site without protection against those hazards; or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed geology and soils (see Draft MEIR, Chapter 6, pages 6.5-17 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City ultimately determined that soil and geologic conditions are site-specific and there is little, if any, cumulative relationship between implementation of the proposed General Plan and cumulative actions in other jurisdictions throughout the region. Furthermore, adherence to all relevant plans, codes, and regulations with respect to project design and construction would reduce project-specific and cumulative geologic impacts to a less than significant level. Therefore, since geologic hazards are site-specific, this project, in combination with other past, present, and reasonably foreseeable future projects, would not create a potentially significant cumulative impact on geological resources. The discussion of geology, soils, and mineral resources in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

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

No Impact. The proposed project site is not located within an Alquist-Priolo earthquake hazard zone. Furthermore, there are no known faults crossing through the proposed project site or in the vicinity of the project.

ii) Strong seismic ground shaking?

Less than Significant Impact. Although the project area is not located within an Alquist-Priolo earthquake hazard zone, the project would be designed and constructed in accordance with the requirements of the Uniform Building Code. As a result, the risk of adverse effects from ground shaking would be reduced to a minimum and is considered to be less than significant.

iii) Seismic-related ground failure, including liquefaction?

No Impact. Liquefaction is most likely to occur in deposits of water-saturated alluvium or similar deposits of artificial fill. Within Sacramento County, the Sacramento downtown area and the Delta are the only areas that are subject to potentially significant liquefaction problems (Sacramento County General Plan, revised 1997). The proposed project area is not within these areas.

iv) Landslides?

No Impact. The project site and the surrounding vicinity is located on a flat area containing no major slopes.

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

Less than Significant Impact. Project construction would include minor amounts of grading, which would be subject to the City of Sacramento Grading, Erosion, and Sediment Control Ordinance (Title 15, Chapter 15.88), and water quality protection requirements that would ensure that soil exposed or disturbed by grading activities is properly stabilized and contained on the project site during construction and after completion of the project, thus minimizing the project's impacts from soil erosion or loss of topsoil.

Due to the limited nature of earth movement in the project area and the requirements for soil stabilization and containment dictated by the City's Grading Ordinance and various water quality protection laws and ordinances, it is not anticipated that the project would result in substantial soil erosion or the loss of topsoil.

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

No Impact. The project site is relatively flat, and is not located on a geologic unit or soil that is unstable. Construction would not require major earth moving activities to accommodate the project; therefore, unstable earth conditions or significant changes to the geologic substructure or topography would not occur.

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

Less than Significant Impact. Soils with high clay content are usually expansive. Minerals in certain clays swell with increased moisture content and then contract during dry periods. The project site is composed of San Joaquin soil, which contains well draining soils and not identified as expansive. All construction would be designed so that grades are constructed in such a way as to discourage soil saturation adjacent to the structure base. Therefore, the project would be considered to have a less than significant impact related to expansive soils.

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

No Impact. Neither septic tanks nor alternative wastewater disposal systems are part of the proposed project. Therefore, there is no impact associated with septic tanks or alternative wastewater disposal systems.

FINDINGS

The project would have no additional project-specific environmental effects related to geology and soils.

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

ENVIRONMENTAL SETTING

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations (CCR) as follows:

> *A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.* (California Code of Regulations, Title 22, Section 66261.10)

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosivity, and reactivity. CCR, Title 22, Sections 66261.20-66261.24 define the aforementioned properties. The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies.

Under Government Code Section 65962.5, the California Department of Toxic Substances Control (DTSC) maintains a list of hazardous substance sites. This list, referred to as the "Cortese List", includes CALSITE hazardous material sites, sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination. In addition, the Sacramento County Environmental Management Department maintains records of toxic or hazardous material incidents, and the Central Valley Regional Water Quality Control Board (RWQCB) keeps files on hazardous material sites.

Most hazardous materials regulation and enforcement in Sacramento County is managed by the Sacramento County Environmental Management Department, which refers large cases of hazardous materials contamination or violations to the Central Valley RWQCB and the California State Department of Toxic Substances Control (DTSC). It is not at all uncommon for other agencies such as the Air Pollution Control District and both the Federal and State Occupational Safety and Health Administrations (OSHA) to become involved when issues related to hazardous materials arise.

Blackburn Consulting (BCI) prepared an Initial Site Assessment (ISA) for the proposed project. Several hazardous material databases were searched to determine the potential for the presence of hazardous materials and hazardous waste in the project area, including those listed below.

Federal Record Sources:

- NPL – National Priority List;
- CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Information System;
- ERNS – Emergency Response Notification System;
- TRIS – Toxic Chemical Release Inventory System;
- SNAP – Superfund NPL Assessment Program Database;
- EPA's Envirofacts – Environmental Protection Agency Envirofacts Database.

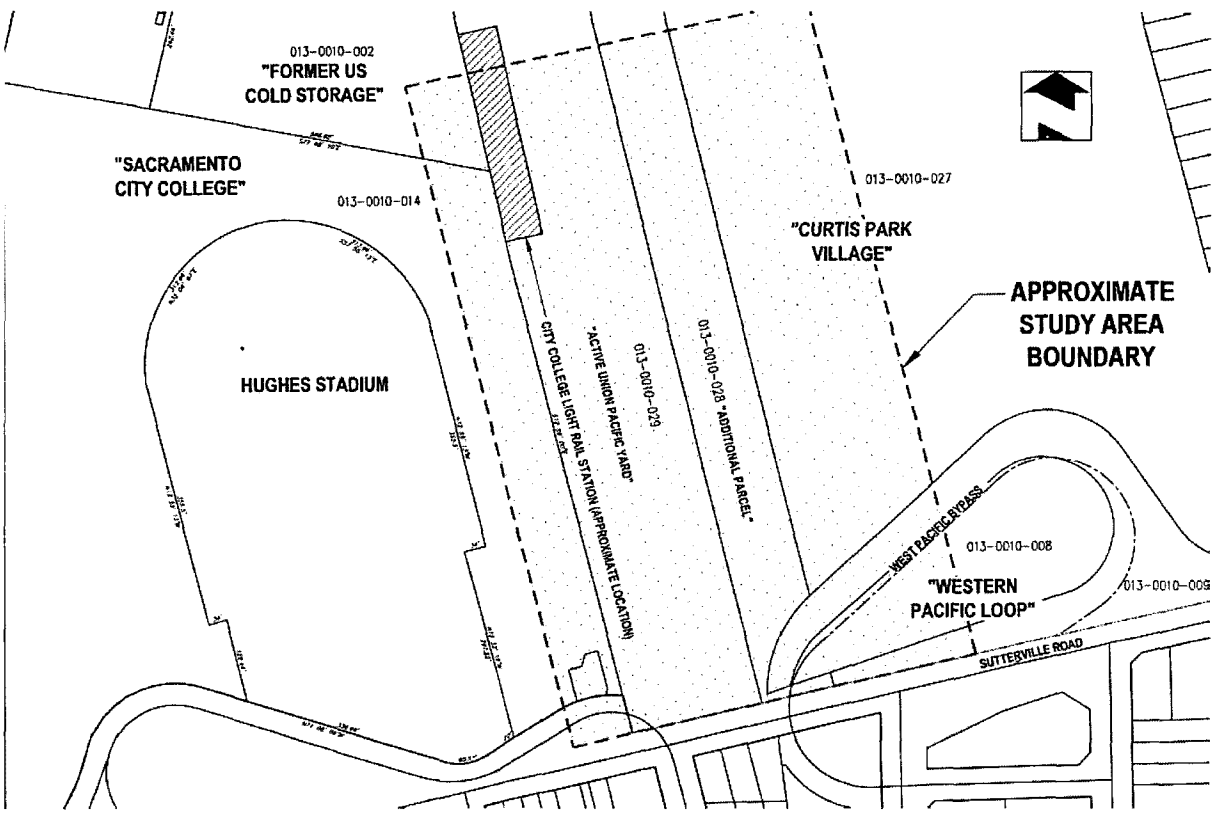
State Record Sources:

- CAL-SITES – Contains potential or confirmed hazardous substance release properties;
- CORTESE – "Cortese" Hazardous Waste and Substances Sites List;
- SWF/LF (SWIS) – Solid Waste Information System;
- LUST – Leaking Underground Storage Tank Information System;
- CA UST – Active Underground Storage Tank Facilities.

PROJECT SETTING

Figure 3.7.1 below shows the locations of various parcels examined in the ISA prepared by Blackburn Consulting.

FIGURE 3.7.1
PARCELS EXAMINED IN INITIAL SITE ASSESSMENT REPORT



Source: Blackburn Consulting, December 2007

Curtis Park Village

The former site of the UPRR maintenance yard, historically the Western Pacific Railroad Sacramento Repair Shops, is located east of the currently active Union Pacific rail yard. Major

railroad maintenance operations occurred on this parcel from the early 1900s until 1983 with a discharge of predominantly petroleum hydrocarbons and heavy metals. The property is currently in the final stages of a long-term investigation and remediation of soil and groundwater contamination which is being overseen by the Department of Toxic Substances Control (DTSC).

Additional Parcel

The parcel identified as "Additional Parcel" in the ISA is the former location of a portion of the Union Pacific maintenance yard. The parcel is located between the Curtis Park Village parcel and the active Union Pacific rail yard and was purchased from Union Pacific by Curtis Park Village in 2005. The Additional Parcel is considered to have potential soil and groundwater contamination issues consistent with the adjacent Curtis Park Village parcel. Accordingly, the Additional Parcel is scheduled for remediation as a future expansion of remedial operations currently being performed at Curtis Park Village.

The Additional Parcel is presently being used as a staging area for the remedial activities being performed on the Curtis Park Village parcel. Contaminated soil is currently stockpiled here for loading onto railcars for disposal. According to DTSC staff, the Additional Parcel is anticipated to be remediated within the next year, however the actual completion date cannot be predicted with certainty.

Active Union Pacific Yard/Light Rail Corridor

This parcel is a corridor which includes the active Union Pacific rail yard and Sacramento Regional Transit Light Rail facilities. Investigation of potential contamination in the active Union Pacific rail yard has been limited in the project study area to surface and shallow subsurface evaluations of soil conditions for the City College Light Rail Station. These studies identified Constituents of Concern (COCs) consisting of heavy metals associated with slag ballast, petroleum hydrocarbons, and Polynuclear Aromatic Hydrocarbons (PAHs). In accordance with the DTSC requirements, remediation was performed for COCs exceeding the Remedial Action Objectives (RAOs) for restricted use. Contaminants exceeding the RAOs and requiring soil removal were generally limited to the upper two feet of soil.

Other investigations conducted in the active rail yard corridor to the north of the project study area have documented petroleum hydrocarbons in soil extending from the ground surface down to groundwater at approximately 25 feet below the ground surface.

Potential additional COCs may exist in the active Union Pacific corridor from miscellaneous spills of hazardous materials that may have occurred during railroad operations spanning many decades. At the present time the active Union Pacific yard is not subject to regulatory requirements for further investigation or remediation of potential COCs.

Former U.S. Cold Storage Facility - Presently Sacramento city College Parking Facilities

This parcel was formerly the site of U.S. Cold Storage and was the location of refrigerated storage activities from 1923 until 1998. The property was purchased by Los Rios Community College District in 1993. The southern portion was leased back to U.S. Cold Storage for their ongoing business until it closed in 1998. Since then, the parcel has been converted entirely to parking for Sacramento City College. Two underground storage tanks (USTs) containing gasoline were removed from the site in 1986. Leakage of heat transfer oil and ethylene glycol was documented at the cold storage facility. Other COCs identified in soil at the parcel include

heavy metals, petroleum gydrocarbons, and oil and grease. The former facility is listed on the DTSC Envirostore Database as "Inactive-Action Required".

Sacramento City College

Located immediately west of the Active Union Pacific Yard, this parcel includes existing roadways, parking, and structures appurtenant to the Sacramento City College facility. Two underground storage tanks (USTs) storing gasoline and waste oil were removed from the east side of what is now the campus bookstore. COCs are believed to affect a limited area and case closure has been requested of Sacramento County Environmental management Department. Four (4) operating USTs are located on the campus as well as various types of compressed gas cylinders, swimming pool chemicals and agricultural chemicals. None of these items are believed to be located in general proximity to the project study area. A former machine shop building was located along the eastern edge of the parcel in the general vicinity of the southern end of present day Light Rail facility. No records were found regarding hazardous materials usage at the former machine shop. This does not however preclude their existence.

Western Pacific Loop

This area is located south east of the proposed project site along the north side of the Sutterville Road overpass is part of the Curtis Park Village parcel, and is scheduled as the last area of the parcels to be remediated. Although remediation operations are planned, it is unknown when unrestricted access to the site will be available.

Underground Product Distribution Lines

Natural gas pipeline warning signs were observed during site reconnaissance visits within the active Union Pacific corridor just south of the proposed project area (below the Sutterville Road overpass). It is assumed that the buried pipelines follow the Union Pacific Railroad right-of-way through the project area, yet the exact location of these lines is not known. No record of contamination resulting from these lines was discovered.

Transformers

The former Union Pacific maintenance yard contained a transformer along the east property line, which was removed and tested for polychlorinated biphenyls (PCBs) as part of the overall site remediation. Several pole-mounted electrical transformers, potentially containing PCBs, are located within the proposed project area.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts related to hazards and hazardous materials are considered significant if the proposed project would:

- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- Expose people (e.g., residents, pedestrians, construction workers) to asbestos containing materials, or other hazardous materials or situations; or
- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during construction or dewatering activities.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed hazards and hazardous materials (see Draft MEIR, Chapter 6, pages 6.6-19 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City ultimately determined that the cumulative context for the analysis of potential hazardous materials impacts is generally site-specific, rather than cumulative in nature. Because the proposed General Plan takes into account all projected future growth and development within the Policy Area, the impacts that are discussed in the Master EIR pertaining to hazardous materials also analyzes all cumulative effects as well. Compliance with all applicable federal, state, and local regulations related to hazards and hazardous materials on a project-by-project basis would be required for all projects within the region, including the Policy Area. Additionally, site-specific investigations would be conducted at all future development sites within the Policy Area to determine impacts and need for mitigation. Based on this information, the analysis in the Master EIR does not include a separate evaluation of cumulative impacts pertaining to hazardous materials during either construction or operation of future projects within the Policy Area.

However, impacts associated with emergency response and airport hazards were analyzed in a cumulative context. The City determined that compliance with all applicable regulations, codes, and plans would ensure that cumulative impacts resulting from potential hazards due to interference with emergency response and aircraft crash hazards would not be considerable resulting in a less than significant cumulative impact. The discussion of hazards and hazardous materials in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

Less than Significant Impact. The proposed project would not include the routine transport, use, or disposal of hazardous materials that could create a significant hazard to the public. Small amounts of hazardous materials would be used during construction activities (i.e., fuel, solvents, and equipment maintenance materials). As indicated above, hazardous materials would primarily be used during construction of the project and are not anticipated to result in any adverse health or environmental impacts to people in the vicinity of the project site. Additionally, any hazardous material uses would be required to comply with all applicable local, state, and federal standards associated with the handling of hazardous materials.

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

Less than Significant with Mitigation Incorporated. Construction activities, such as refueling and minor maintenance of construction equipment on location, may lead to minor fuel and oil spills. The use and handling of hazardous materials during construction

activities would occur in accordance with applicable federal, state, and local laws including California Occupational Health and Safety Administration (CalOSHA) requirements. However, should any fuel and/or oil spills occur in areas near sensitive receptors, these could be considered potentially significant unless the following mitigation measures are incorporated:

Mitigation Measures

MM 3.7.1 Prior to the start of construction, the construction contractor shall designate staging areas where fueling and oil-changing activities will take place. The staging area(s) shall be reviewed and approved by the City of Sacramento Resident Engineer for the project and the Storm Water Pollution and Prevention Manager prior to the start of construction. No fueling and oil-changing activities shall be permitted outside the designated staging areas. The staging areas, as much as practicable, shall be located on level terrain and away from sensitive land uses such as residences, day care facilities, and schools. The proposed staging areas shall be identified in the Storm Water Pollution Prevention Plan (SWPPP).

Timing: *Prior to start of construction and during project construction.*

Implementation: *City of Sacramento Department of Transportation.*

Underground Product Distribution Lines

Natural gas pipeline warning signs were observed within the active Union Pacific corridor just south of the proposed project area (below the Sutterville Road overpass). It is assumed that the buried pipelines follow the UPRR right-of-way through the project area, yet the exact location of these lines is not known. Although no record of contamination resulting from these lines was discovered, there is always the potential for unidentified leaks along the pipes.

MM 3.7.2 Prior to the start of construction, the depth and location of gas pipelines shall be determined and mapped by the appropriate agency and provided to the City to ensure that project construction activities would not disrupt or damage the natural gas pipelines.

Timing: *Prior to start of construction.*

Implementation: *City of Sacramento Department of Transportation.*

Transformers

Several pole-mounted electrical transformers, potentially containing PCBs, are located within the proposed project area. If removal or relocation of these transformers is necessary, it is possible that PCBs be released into the environment.

MM 3.7.3 Should pole removal or relocation be necessary for the project, the City shall obtain, from the utility owner, data warranting that these transformers are free of PCB contaminated oil. If transformers contain PCBs, they shall be handled

and disposed of in accordance with applicable hazardous materials regulations.

Timing: *Prior to start of construction.*

Implementation: *City of Sacramento Department of Transportation.*

Implementation of the above mitigation measures and compliance with other applicable hazardous material regulations would ensure that impacts resulting from the accidental release of hazardous materials be minimized to **less than significant**.

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

Less than Significant with Mitigation Incorporated. Sacramento City College is located west and immediately adjacent to the proposed project site, as is the Sacramento City College Child Development Center. Emission from construction equipment would occur intermittently, is expected to dissipate rapidly, and would be generated in less than significant levels, as discussed above in Section 3.3 Air Quality. Fueling and equipment maintenance activities have the potential to result in accidental release of hazardous substances. Implementation of mitigation measures **MM 3.7.1** through **MM 3.7.3** would ensure that impacts related to these releases would have a less than significant impact on students and children.

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

Less than Significant With Mitigation Incorporated. The ISA for the proposed project found that portions of the project site and adjacent sites contain hazardous materials. Normal active railroad operations within the Active Union Pacific Yard are not generally subject to mandatory environmental assessment, therefore relatively limited existing information regarding subsurface conditions is available for this portion of the project area. In addition to contaminants known to exist in the railroad right-of-way, such as lead and arsenic (associated with slag ballast), there may exist a variety of potential contaminants resulting from day to day operations over many decades, and if present, may become an issue for both worker safety and property acquisition unless mitigation measures are implemented.

The ISA identified several parcels on which remediation has been performed or will be performed in the near future under the direction of the DTSC. The remediation consists predominantly of shallow soil excavation (generally within the upper five feet; deeper in some areas) in areas identified as exceeding the Remedial Action Objectives (RAOs). It should be noted that although these parcels are being remediated to the standards approved by the DTSC for future residential development, this does not preclude encountering any undiscovered zones exceeding the RAOs. In addition it should be understood that soil meeting the RAOs may still be subject to regulatory requirements regarding disposal or reuse.

One site, the former U.S. Cold Storage facility, is listed on the DTSC Envirostore Database as "Inactive-Action Required". Clarification of the status of this site investigation/remediation will be needed if the project includes a portion of this parcel.

Mitigation Measures

MM 3.7.4 For any areas of construction proposed within the Active Union Pacific Yard, a site-specific surface and subsurface investigation for Constituents of Concern shall be completed prior to the start of construction. Investigation, construction, and remediation activities shall be conducted pursuant to DTSC protocols, including DTSC review and concurrence with comprehensive workplans, soil management plans, and health and safety plans. Any reports generated from the investigations shall be submitted to DTSC.

Timing: *Prior to start of construction.*

Implementation: *City of Sacramento Department of Transportation and the Department of Toxic Substances Control.*

MM 3.7.5 For construction activities in the area of the former U.S. Cold Storage property, a further search of available existing environmental documentation (including work that may have been performed prior to construction of the Sacramento City College parking structure) is recommended to better define the status of site investigation and remediation activities. If documentation is insufficient to determine the presence or absence of hazardous levels of constituents of concern, then a targeted investigation shall be conducted to determine the presence or absence of hazardous levels of constituents of concern.

Investigation, construction, and remediation activities shall be conducted pursuant to DTSC protocols, including DTSC review and concurrence with comprehensive workplans, soil management plans, and health and safety plans. Any reports generated from the investigations shall be submitted to DTSC.

Timing: *Prior to start of construction.*

Implementation: *City of Sacramento Department of Transportation and the Department of Toxic Substances Control.*

MM 3.7.6 Throughout the project construction area, site specific Phase II soil sampling for hazardous materials shall be conducted in areas where ground disturbing activities would take place as part of project construction. If constituents of concern are identified, applicable regulatory requirements regarding disposal or reuse of contaminated materials shall be followed.

Timing: *Prior to start of construction.*

Implementation: *City of Sacramento Department of Transportation and the Department of Toxic Substances Control.*

Implementation of mitigation measures **MM 3.7.4** through **MM 3.7.6** would ensure that impacts related to hazardous material sites be reduced to **less than significant** levels.

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

No Impact. Airport-related hazards are generally associated with aircraft accidents, particularly during takeoffs and landings. Airport operation hazards include incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the imaginary surfaces surrounding an airport. The nearest airport/airstrip is the Sacramento Executive Airport, located approximately 1.5 miles south of the project site in Sacramento, CA. The proposed project would not be located within the airport's overflight zone or safety zone boundaries (Sacramento County General Plan, 1998) and is not anticipated to penetrate the navigable airspace of the Sacramento Executive Airport, therefore no impact is anticipated.

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

No Impact. See discussion e) above. The nearest airstrip is located approximately 1.5 miles south of the project site (Sacramento Executive Airport). Normal operations of this facility would not result in safety related or other adverse impacts to people working or residing at or near the project area.

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

Less than Significant Impact. The proposed project would involve construction of facilities away from roadways or other corridors that would be utilized as emergency or evacuation routes. While some additional traffic would be generated on area streets due to project construction, increased traffic would not be substantial and would not increase congestion such that movement through emergency or evacuation routes would be impeded. The project would not impede or conflict with the objectives or policies of the identified emergency response plans and evacuation plans.

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

No Impact. The project area is located in an urban, built-up environment. The site is not adjacent to or in close proximity to wildland areas.

FINDINGS

All additional potentially significant environmental effects of the project related to hazardous materials can be mitigated to a less than significant level.

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

ENVIRONMENTAL SETTING

The project area is within the jurisdictional boundaries of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. Specifically, the RWQCB identifies potential water quality concerns, confirms and characterizes water quality problems through assessments, remedies problems through imposing

or enforcing appropriate measures, and monitors problem areas to assess effectiveness of remedial measures.

The project area includes the area north of Sutterville Road, west of 24th Street, and east of Sacramento City College. The proposed overcrossing would span the light rail and Union Pacific Railroad tracks. There are no creeks, rivers, or manmade water features within or in the vicinity of the project area. The nearest river is the Sacramento River, located approximately 1.5 miles west. Two manmade lakes are within the William Land Municipal Golf Course, located approximately 0.75 mile west of the site. No stormwater drainages are located within the site.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts related to hydrology and water quality are considered significant if the proposed project would:

- Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by consumption and/or operational activities; or

- Substantially increase exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed hydrology and water quality (see Draft MEIR, Chapter 6, pages 6.7-19 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City determined that implementation of the Sacramento 2030 General Plan polices, along with the City's ordinances, Stormwater Quality Design Manual for the Sacramento and South Placer Regions, and the SQIP would meet the state water quality discharge criteria and improve the quality of water entering local waterways.

Future development within the Policy Area would require compliance with the following permits and plans which would reduce the city's contribution of urban pollutants to receiving waters:

- Sacramento-area Phase I National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System Permit CAS082597,

- Stormwater Quality Design Manual for the Sacramento and South Placer Regions (Design Manual) BMPs, and LID measures to reduce pollutants in storm water and non-stormwater discharges to the Maximum Extent Practicable (MEP),

- City of Sacramento Stormwater Management and Discharge Control Code,

- City of Sacramento General Plan policies related to hydrology and water quality, and the protection and preservation of natural resources,

- State NPDES General Permit for Stormwater Discharges Associated with Construction and associated Storm Water Pollution Prevention Plan (SWPPP),
- Erosion and Sediment Control Plan.

Therefore, the project's contribution would not be considerable resulting in a less than significant impact to cumulative water quality degradation in the Sacramento River and Delta.

In addition, the City determined that with implementation of the policies set forth in the 2030 General Plan, flood hazards associated with development consistent with the 2030 General Plan, would be a less than significant cumulative impact. The discussion of hydrology and water quality in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

Less than Significant Impact. Although there are no waterways or water features in the vicinity of the proposed project site, implementation of the proposed project could potentially result in the violation of water quality standards or water discharge requirements during project construction due to earth moving activities and soil disturbance. Requirements of the City's NPDES permit require that measures be included in the grading plans that would minimize erosion potential and water quality degradation for the project area. The purpose of the NPDES permit is to protect water quality from development areas that would discharge into a surface water body. During construction of the project, the City's construction contractor must eliminate non-storm water discharges to storm water systems, the contractor must develop and implement a SWPPP and perform monitoring of discharges to storm water systems. The City uses a set of Best Management Practices (BMPs) for both pre- and post-construction periods, which would be applied to the project. The City's Department of Utilities enforces compliance with the City's BMP requirements. The contractor would identify the appropriate BMPs in coordination with the City's Department of Utilities for the proposed project. These requirements would ensure a less than significant impact to water quality pollution resulting from construction of the project.

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

Less than Significant Impact. The amount of additional pavement added as a result of the proposed overcrossing would be minimal in terms of adverse effects on groundwater resources. The proposed project does not contain elements that either add to or draw from groundwater.

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

Less than Significant Impact. The project site is located on a relatively flat area and would be subject to minimal excavation to provide for the foundation of the new structure. Additionally, small areas adjacent to the structure could be subject to minor grading. Excavation and grading would be conducted pursuant to the requirements of the Clean Water Act, the City's NPDES permit, and the project's SWPPP, to ensure that drainage through and near the project area follows historic drainage patterns, and historic water volumes and velocity do not change from existing conditions; therefore, less that significant impacts from erosion and siltation are expected from project implementation.

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

Less than Significant Impact. Refer to discussion c) above. Relatively minor amounts of new concrete would be added as a result of the project. Although added impervious surfaces would constitute slight increases in runoff, the increase would not be substantial; therefore, it is anticipated that the project would result in less than significant impacts from on- or off-site flooding.

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

Less than Significant Impact. The project would cause a very slight increase in the quantity of runoff generated in a storm event through the increase in impervious surface area associated with the overcrossing. The quantity of additional runoff generated from the project would not be substantial and would not result in polluted runoff, as it would serve only pedestrians and bicyclists. The structure would not provide access to motorized vehicles, which could otherwise result in deposits of various materials that could pollute stormwater.

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

Less than Significant Impact. As discussed in e) above, the project area would serve non-motorized pedestrian traffic. Deposits of heavy metals, oil and grease, as well as other chemicals used by motor vehicles would not be generated by the project.

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

No Impact. The proposed project does not contain a housing component and therefore would not place housing within a 100-year floodplain. Additionally, the project would be located outside of the 100-year flood hazard zone.

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

No Impact. All work, including installation of the new bridge support structures, would be located outside of the 100-year flood zone; therefore, it is anticipated that the project

would have no impact on impeding or redirecting flood flows within a 100-year flood hazard area.

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

No Impact. See responses g) and h) above. The project would not create new risk of flooding in or near the project area. Additionally, the project site is not located on or near a levee or dam.

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

No Impact. The proposed project area is not located near any ocean coast or seiche hazard areas. Additionally, no potential for mudflows is anticipated.

FINDINGS

The project would have no additional project-specific environmental effects related to hydrology and water quality.

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

ENVIRONMENTAL SETTING

The proposed project area is located north of Sutterville Road between Freeport Boulevard and 24th Street, just east of Sacramento City College. According to the City of Sacramento Zoning Map, updated November 2008, designated land uses in the project area include Sacramento City College to the west, commercial and residential to the east, and industrial and commercial south of Sutterville Road. Immediately adjacent to the north and east is the planned Curtis Park Village development, which will include residential and commercial land uses. Further east of the project area is the established Curtis Park residential neighborhood.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts related to land use are considered significant if the proposed project would:

- Physically divide an established community; or
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project or any habitat conservation plan or natural community conservation plan.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/. The discussion of land use consistency and compatibility (Chapter 4) in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

The City determined that the proposed land use designations under the 2030 General Plan would not produce excessive noise, light, odors, or traffic that could result in a land use incompatibility with adjacent lands.

DISCUSSION OF IMPACTS

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

No Impact. The proposed project would construct a pedestrian/bicycle overcrossing that would extend from the LRT station at Sacramento City College to the existing and proposed neighborhoods east of the UPRR tracks. The project does not contain any features that would limit or physically divide an established community, but would instead improve accessibility and safety.

b) *Would the project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

No Impact. The proposed project would not change or interfere with any existing land use designations, plans, or policies and would comply with all City of Sacramento General Plan policies, as they relate to the proposed project.

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

No Impact. No habitat conservation plans or natural community conservation plans are in place now or applicable to the project area. The project would have no impact with regard to these types of plans.

FINDINGS

The project would have no additional project-specific environmental effects related to land use.

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

ENVIRONMENTAL SETTING

Mineral extraction activities do not occur in the vicinity of the project site. No roadways in the vicinity of the project serve as routes for traffic involved in mineral extraction activities.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts related to mineral resources are considered significant if the proposed project would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state; or
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed mineral resources (see Draft MEIR, Chapter 6, pages 6.5-17 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City ultimately determined that development under the proposed General Plan, in combination with all other development in the County, could limit the availability of a known mineral resource potentially resulting in a significant cumulative impact. However, because proposed General Plan policies do not prohibit existing mineral production and encourage that existing operations be protected and buffered from incompatible surrounding land uses, contributions to adverse impacts on mineral resources as a result of the proposed General Plan would not be cumulatively considerable. Therefore, implementation of the proposed General Plan would result in a less than significant cumulative impact. The discussion of geology, soils, and mineral resources in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

a) *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

No Impact. The proposed project would not use or extract any mineral resources and would not restrict access to known mineral resource areas. The proposed overcrossing would not use non-renewable resources in a wasteful manner or result in the loss of availability of a known mineral resource.

b) *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact. Refer to response a) above. The project would have no impact on mineral resources.

FINDINGS

The project would have no additional project-specific environmental effects related to mineral resources.

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

ENVIRONMENTAL SETTING

Noise-Sensitive Land Uses

Noise-sensitive land uses generally include those uses where exposure to noise would result in adverse effects, as well as uses where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Other noise-sensitive land uses include hospitals, convalescent facilities, parks, hotels, churches, libraries, and other uses where low interior noise levels are essential.

Noise-sensitive land uses located near the proposed project site consist of Sacramento City College to the west and residential housing to the east along 24th Street.

Ambient Noise Levels

The three major sources of noise in the City of Sacramento are surface traffic, railroads, and aircraft. The dominant noise sources in the vicinity of the project come from the Union Pacific Railroad, the light rail transit, overhead aircraft noise from the Sacramento Executive Airport, and vehicular traffic along Sutterville Road. Additionally, vehicle traffic (tire screech and echo) from

within the adjacent parking structure at Sacramento City College also contributes to increased noise levels at the site.

Acoustic Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. Sound, as described in more detail below, is mechanical energy transmitted in the form of a wave because of a disturbance or vibration.

Amplitude

Amplitude is the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels (dB) on a logarithmic scale. For example, a 65 dB source of sound, such as a truck, when joined by another 65 dB source, results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). Amplitude is interpreted by the ear as corresponding to different degrees of loudness. Laboratory measurements correlate a 10 dB increase in amplitude with a perceived doubling of loudness and establish a 3 dB change in amplitude as the minimum audible difference perceptible to the average person.

Frequency

Frequency is the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz (Hz). One Hz equals one cycle per second. The human ear is not equally sensitive to sound of different frequencies. Sound waves below 16 Hz or above 20,000 Hz cannot be heard at all, and the ear is more sensitive to sound in the higher portion of this range than in the lower. To approximate this sensitivity, environmental sound is usually measured in A-weighted decibels (dBA). On this scale, the normal range of human hearing extends from about 10 dBA to about 140 dBA.

Characteristics of Sound Propagation and Attenuation

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates at a rate between 3.0 to 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. For mobile transportation sources, such as highways, hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources typically attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source.

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

Noise Descriptors

The selection of a proper noise descriptor for a specific source is dependent upon the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average-hourly noise level (in L_{eq}) and the average-daily noise levels (in L_{dn}/CNEL). Common acoustical terms and descriptors are summarized below in **Table 3.11.1**.

TABLE 3.11.1
COMMON ACOUSTICAL TERMS AND DESCRIPTIONS

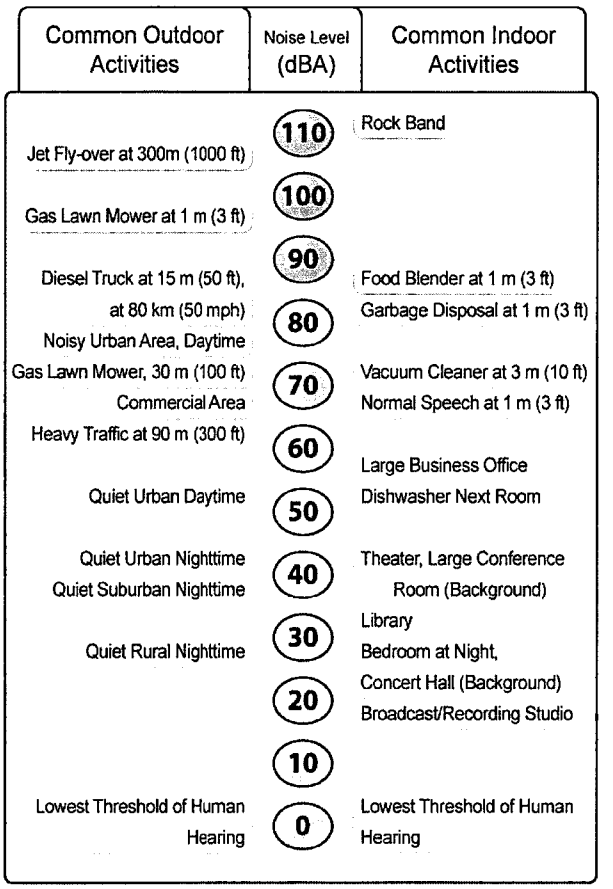
Descriptor	Definition
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise or sound at a given location, typically defined by the Leq level.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
Decibel (dB)	A unit-less measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to referenced sound pressure amplitude. The reference pressure is 20 micro-pascals.
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level in decibels which approximates the frequency response of the human ear.
Energy Equivalent Noise Level (Leq)	The energy mean (average) noise level. The instantaneous noise levels during a specific period of time in dBA are converted to relative energy values. From the sum of the relative energy values, an average energy value (in dBA) is calculated.
Minimum Noise Level (Lmin)	The minimum instantaneous noise level during a specific period of time.
Maximum Noise Level (Lmax)	The maximum instantaneous noise level during a specific period of time.
Day-Night Average Noise Level (DNL or Ldn)	The 24-hour Leq with a 10 dBA "penalty" for noise events that occur during the noise-sensitive hours between 10:00 p.m. and 7:00 a.m. In other words, 10 dBA is "added" to noise events that occur in the nighttime hours to account for increases sensitivity to noise during these hours.
Community Noise Equivalent Level (CNEL)	The CNEL is similar to the Ldn described above, but with an additional 5 dBA "penalty" added to noise events that occur between the hours of 7:00 p.m. to 10:00 p.m. The calculated CNEL is typically approximately 0.5 dBA higher than the calculated Ldn.
Single Event Level (SEL)	The level of sound accumulated over a given time interval or event. Technically, the sound exposure level is the level of the time-integrated mean square A-weighted sound for a stated time interval or event, with a reference time of one second. Often also referred to as the Single Event Noise Exposure Level (SENEL).

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general

well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases. The acceptability of noise and the threat to public well-being are the basis for land use planning policies preventing exposure to excessive community noise levels. Typical community noise sources and associated noise levels are summarized in **Figure 3.11.1**.

FIGURE 3.11.1
TYPICAL COMMUNITY NOISE SOURCES AND ASSOCIATED NOISE LEVELS



Source: Caltrans 2007

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and habituation to noise over differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted: the so-called "ambient" environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged. Regarding increases in A-weighted noise levels, knowledge of the following relationships will be helpful in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived by humans.
- Outside of the laboratory, a 3-dB change is considered a just-perceivable difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected. An increase of 5 dB is typically considered substantial.
- A 10-dB change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Regulatory Setting

Federal, state and local governments have established noise standards and guidelines to protect citizens from potential hearing damage and various other adverse physiological and social effects associated with noise. The applicable standards and guidelines for this study area are discussed below.

Local Plans, Policies, Regulations, and Ordinances

The project would be subject to City of Sacramento Noise Policies and Ordinances as they apply to construction of the proposed project. The City of Sacramento General Plan outlines the following policy relating to construction noise:

Policy EC 3.1.7 Construction Noise: The City shall require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses to the extent feasible.

City of Sacramento Code allows the following exemption from meeting noise standards for noise resulting from construction activities:

City of Sacramento Code Section 8.68.080(E): Noise sources due to the erection (including excavation), demolition, alteration or repair of any building or structure between the hours of seven a.m. and six p.m., on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, and between nine a.m. and six p.m. on Sunday; provided, however, that the operation of an internal combustion engine shall not be exempt pursuant to this subsection if such engine is not equipped with suitable exhaust and intake silencers which are in good working order. The director of building inspections, may permit work to be done during the hours not exempt by this subsection in the case of urgent necessity and in the interest of public health and welfare for a period not to exceed three days. Application for this exemption may be made in conjunction with the application for the work permit or during progress of the work.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts related to noise are considered significant if the proposed project would:

- Result in exterior noise levels in the Policy Area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;

- Result in residential interior noise levels of 45 dBA Ldn or greater caused by noise level increases due to the project;
- Result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;
- Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction, highway traffic, and rail operations.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed noise and vibration (see Draft MEIR, Chapter 6, pages 6.8-24 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City ultimately determined that noise generated by each and every construction project taking place in the Policy Area would be temporary, and, therefore, would not add to the Policy Area's permanent ambient noise background. In addition, construction noise from each project would be localized to the immediate vicinity of that site and would not be part of the cumulative context of other construction projects taking place simultaneously at more distant locations. Noise from stationary construction equipment (i.e., generators) would decrease at approximately 6 dBA per doubling of distance. Therefore, it would not be common for construction-related noise from individual projects to result in a cumulative impact.

Since City policy would require mitigation of construction noise from each individual future development project and since construction noise from each project would be restricted in intensity and hours of occurrence by the City's Noise Ordinance, construction noise from each project would be mitigated and the project's contribution would not be considerable resulting in less than significant cumulative impact. The discussion of noise and vibration in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

Less than Significant with Mitigation Incorporated. Construction noise associated with the project would be temporary and would include noise from activities such as site grading, hauling of materials to and from the project site, and pouring of concrete. While it is not

likely, pile driving may be used to install bridge support columns for the project. Construction noise levels at nearby residential dwellings and at the college would be partially lessened by the existing land buffer between land uses. However, because exterior ambient noise levels typically decrease during the late evening and nighttime hours as a result of decreased community activities (e.g., vehicle traffic), construction activities being performed during these more noise-sensitive periods of the day could result in increased levels of annoyance and potential sleep disruption to occupants of nearby residential dwellings.

As a result, construction-generated noise levels occurring during the late evening and nighttime hours would be considered ***significant*** unless the following mitigation measures are implemented.

Mitigation Measures

MM 3.11.1 Site preparation and construction activities along the light rail and UPRR tracks (i.e., construction areas closest to sensitive receptors) shall be limited to between the hours of 7:00 a.m. to 6:00 p.m. Monday through Saturday, and 9:00 a.m. to 6:00 p.m. on Sunday. Noise-generating construction equipment maintenance activities shall be limited to the same hours (City of Sacramento, Noise Control Ordinance 8.68.080).

Timing: *During all construction phases of the project.*

Implementation: *City of Sacramento Department of Transportation.*

MM 3.11.2 Construction equipment shall be equipped with mufflers, in accordance with manufacturers' specifications. Additionally, equipment staging areas shall be located at the furthest distance possible from nearby residential land uses.

Timing: *During all construction phases of the project.*

Implementation: *City of Sacramento Department of Transportation.*

Implementation of the above mitigation measures would ensure that noise levels during the construction period of the project would be limited to the less noise-sensitive daytime hours. Additional measures, such as the use of mufflers, would reduce individual equipment noise levels by as much as approximately 10 dBA. With mitigation, noise impacts from construction activities would be considered ***less than significant***.

b) *Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant with Mitigation Incorporated. Activities associated with the proposed project would likely not involve the use of any equipment or processes that would result in potentially significant levels of ground vibration, however there is a possibility that a pile driver may be used to install the bridge support columns necessary for the overcrossing structure. Increases in groundborne vibration levels attributable to the proposed project would be associated with short-term construction-related activities. Ground vibration 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 results in structural damage. While pile driving may be used for project construction, and could result in periodic groundborne vibration, it is not anticipated that groundborne vibration would be greater than that currently caused by existing movements of light rail and heavy railroad trains through the area, and would not cause structural damage at nearby buildings. Additionally, implementation of mitigation measure **MM 3.11.1** would ensure, pile driving activities be limited to daytime hours, thus minimizing effects of these activities; therefore, impacts from groundborne vibration would be considered ***less than significant.***

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

No Impact. Existing noise sources in the project vicinity include the light rail, UPRR, vehicle traffic from Sutterville Road, and vehicle traffic from the Sacramento City College parking area. The proposed overcrossing would not include permanent features that would result in significant or permanent noise level increases above those already existing at the site.

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

Less than Significant with Mitigation Incorporated. Implementation of the proposed project may result in potentially significant increases in ambient noise levels at nearby existing residential land uses associated with short-term construction activities. Implementation of **MM 3.11.1** and **MM 3.11.2** would reduce this impact to ***less than significant.***

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

No Impact. The nearest airport/airstrip is the Sacramento Executive Airport located approximately 1.5 miles south of the project site; however the project site is not located within the airport land use plan area. Therefore, there would be no impact associated with public airports.

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

No Impact. Refer to response e) above.

FINDINGS

All additional potentially significant environmental effects of the project related to noise and vibration can be mitigated to a less than significant level.

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

ENVIRONMENTAL SETTING

The proposed project area encompasses the light rail and UPRR tracks adjacent to the approved Curtis Park Village development. Curtis Park Village, upon completion, will provide residential and commercial land uses north of Sutterville Road. Residential land uses are also located further east along 24th Street.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts related to population and housing are considered significant if the proposed project would:

- Induce substantial population growth; or
- Displace a substantial number of existing housing or people necessitating the construction of replacement housing elsewhere.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/. The discussion of population, employment, and housing (Chapter 5) in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

The City determined that with implementation of the Sacramento 2030 General Plan polices, population, housing, employment, and jobs-housing balance would not be impacted as the plan is designed to encourage and support development that balances these issues.

DISCUSSION OF IMPACTS

a) *Would the project induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?*

No Impact. The proposed project does not contain or propose any features to induce growth above that which is expected from existing and planned and approved residential development in the area; therefore, the project is expected to have no impact on growth inducement in the area.

b) *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No Impact. No homes would be taken as part of the proposed project; therefore there would be no need to construct replacement housing.

c) *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. As discussed in b) above, the project would not involve the taking of any housing, and would, therefore, not displace any people or necessitate the construction of replacement housing.

FINDINGS

The project would have no additional project-specific environmental effects related to population and housing.

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

ENVIRONMENTAL SETTING

The project area is serviced by the City of Sacramento Police Department. The City of Sacramento Fire District provides fire protection, prevention, and emergency medical services. Educational services are provided through the Los Rios Community College District and the Sacramento City Unified School District. The City provides maintenance of public facilities, including the project area roadways.

THRESHOLDS OF SIGNIFICANCE

For purposes of this MND, impacts on public services are considered significant if the proposed project would:

- Require, or result in, the construction of new, or the expansion of existing, facilities related to the provision of police or fire protection;
- Generate students that would exceed the design capacity of existing or planned schools that would result in the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts;
- Require, or result in, the construction of new, or the expansion of existing, facilities related to the provision of library services; or
- Require, result in, the construction of new, or the expansion of existing emergency service facilities related to the provision of emergency services.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed public services (see Draft MEIR, Chapter 6, pages 6.10-10 et seq. (police); pages 6.10-21 et seq. (fire); pages 6.10-39 et seq. (schools); 6.10-52 et seq. (libraries); and pages 6.10-64 et

seq. (emergency services)). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City determined that there are no other projects within the Policy Area that when combined together along with the project would compound or increase environmental effects on police of fire services or facilities. For schools, libraries, and emergency services, the City determined that implementation of Sacramento 2030 General Plan policies ensures there would be adequate facilities and emergency services and response would be provided to serve any anticipated increase in demand. Therefore, there would be a less than significant cumulative impact related to public services. The discussion of public services in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

a) *Fire protection?*

No Impact. The proposed project would not include a residential or commercial component that would increase human presence in the area, nor would it result in the need for additional staff, equipment, or facilities to service the project area; therefore, there would be no impact related to acceptable service ratios, response times, and other performance objectives for fire protection.

b) *Police protection?*

No Impact. Refer to response a) above. There would be no need for additional staff, equipment, or facilities to maintain acceptable service ratios, response times, and other performance objectives for police protection.

c) *Schools?*

No Impact. Refer to response a) above. The proposed project would not result in an increased demand for schools. As such, there would be no need for additional facilities to maintain acceptable service ratios for schools.

d) *Parks?*

No Impact. Refer to response a) above. The proposed project would not result in an increased demand for parks. As such, there would be no need for additional park facilities to maintain acceptable service ratios for parks.

e) *Other public facilities?*

No Impact. Refer to response a) above. The proposed project would not include a residential or commercial component that would increase human presence in the area resulting in the need for additional public facilities.

FINDINGS

The project would have no additional project-specific environmental effects related to public services.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.14 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?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City of Sacramento General Plan contains a Conservation and Open Space Element that identifies the need to maintain existing open space and natural recreational areas, as well as to create additional areas for the enjoyment of residents and the protection of the environment. The goals, policies, and actions provided are intended to achieve the City's vision of open spaces that are accessible to all members of the community, however there are no known plans to develop new recreational facilities within the project area.

Parks and Recreation Services

The provision of parks, open spaces and recreation services is an important part of the City's physical and service structure. The Department of Parks and Recreation is the major provider of leisure and enrichment activities for Sacramento residents, with areas of service including park and tree maintenance; recreation and human services; park planning, design and development; marketing and special events; and, administrative services. The City Parks and Recreation Department operates and maintains approximately 3,122 acres of developed and undeveloped parks and recreation facilities at 200 separate sites. These types of parks and recreation facilities include neighborhood parks, community parks, regional parks, parkways, and open spaces including some public school sites.

Parks and Recreation Plan

The Parks and Recreation Master Plan sets forth the goals and policies intended to guide planning and management of the City of Sacramento Parks and Recreation System. The Master Plan has been developed to inventory existing park and recreational resources, estimate the need for additional parks and recreation facilities, and identify the actions to be taken to fulfill the Plan's vision. The Master Plan is considered a part of the General Plan.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts on parks, recreation, and open space resources are considered significant if the proposed project would:

- Cause or accelerate a substantial physical deterioration of existing area parks or recreational facilities; or
- Create a need for construction or expansion of recreational facilities beyond what was anticipated in the General and/or Community Plans.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed recreation (see Draft MEIR, Chapter 6, pages 6.9-13 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City determined that there are no other projects within the Policy Area that when combined together along with the project would compound or increase environmental effects on park facilities. Implementation of Sacramento 2030 General Plan polices ensures a less than significant cumulative impact related to recreation facilities. The discussion of parks and open space in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

No Impact. The proposed project is a pedestrian/bicycle overcrossing intended to provide safe access to and from the light rail platform at Sacramento City College and the approved Curtis Park Village. The project would not create any new demands for any type of recreational facilities; therefore, there would be no impact.

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

No Impact. The proposed project would not require the construction or expansion of recreational facilities; therefore there would be no impact.

FINDINGS

The project would have no additional project-specific environmental effects related to parks, recreation, and open space.

3.15 TRANSPORTATION/TRAFFIC — Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
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)?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The existing area consists of a parking structure to the west at Sacramento City College and both a light rail stop and Union Pacific Railroad adjacent to the west. There are no roadways that travel through the proposed project area. Students at Sacramento City College use the passenger platform to load and unload onto the light rail train. Individuals also cross the two sets of tracks to reach the Curtis Park neighborhood east of the project site.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts on transportation and circulation are considered significant if the proposed project would:

Roadways in City of Sacramento

- Cause the roadway facility to degrade from Level of Service (LOS) C or better to LOS D or worse. For facilities that are already worse than LOS C without the project, a significant impact occurs if the project increases the V/C ratio by 0.02 or more on a roadway. [Note: The proposed policies for the 2030 General Plan would change the LOS policy for

roadways such that the standard in multi-modal districts would be LOS E and the standard in all areas outside of multi-modal districts would be LOS D.]

Freeways

Interstate 5 and Interstate 80

- Cause the freeway segment to change from LOS A, B, C, D, or E under the 2030 No Project to LOS F, or
- Add one trip to a freeway segment already operating worse than LOS E under the 2030 No Project.

State Routes 50, 51 and 99

- Add one trip to a freeway segment already operating worse than LOS F under the 2030 No Project.

Transit

- Change the project-generated ridership, when added to the existing or future ridership, exceeds existing and/or planned system capacity that adversely affects transit system operations or facilities in a way that discourages ridership (e.g., removes shelter, reduces park and ride). Capacity is defined as the total number of passengers the system of buses and light rail vehicles can carry during the peak hours of operation.

Bicycles

- Eliminate or adversely affects an existing bikeway facility in a way that discourages bicycle uses; interferes with the implementation of a proposed bikeway; or results in unsafe conditions for bicyclists, including unsafe bicycle/pedestrian or bicycle/motor vehicle conflicts.

Pedestrian Facilities

- Adversely affect an existing pedestrian facility or results in unsafe conditions for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflicts.

Parking

- Exceed the available or planned parking supply for typical day conditions. However, the impact would not be significant if the project is consistent with the parking requirements stipulated in the City Code.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed transportation and circulation (see Draft MEIR, Chapter 6, pages 6.12-49 et seq.). The Master EIR is available for review at the offices of Development Services Department, 300

Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City determined that with implementation of the Sacramento 2030 General Plan policies, cumulative impacts to bicycle, pedestrian, and parking facilities are not anticipated. There are, however, some significant and unavoidable cumulative impacts to roadways. The discussion of transportation and circulation in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

Less Than Significant Impact. The proposed project is a pedestrian project that would not create or add vehicular traffic lanes. Additionally, the project does not contain features for motorized vehicle access. The proposed project would provide a safe pedestrian and bicycle route across the light rail and UPRR tracks just east of Sacramento City College, north of Sutterville Road and would have no connectivity to existing roadways.

Short-term construction activities may temporarily disrupt traffic along Deeble Street/Western Pacific Avenue Bypass as construction equipment enter and exit the project site. Because any potential traffic disruption resulting from the project would be construction-related and, thus, temporary in nature, the overall impacts are considered less than significant.

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

No Impact. Overall, the project would cause no impact to the LOS established by the City of Sacramento or the County of Sacramento because the project does not involve the construction or modification of roadways. Additionally, the project contains no growth inducing land uses, businesses, or residential development.

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

No Impact. The proposed project would not result in a change in air traffic patterns or increase traffic levels that would result in a substantial safety risk. The project does not propose any structures that would impede a height limitation in close proximity to an airport; therefore, no impacts on air traffic patterns would occur as a result of the project.

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

No Impact. The project proposes to construct a pedestrian/bicycle overcrossing over the light rail and UPRR tracks east of Sacramento City College to eliminate an existing hazard from pedestrians crossing the railroad and light rail tracks on foot. No design features of the project would present additional hazards.

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

No Impact. The proposed project would not be constructed on or intersect with existing roadways and is therefore not expected to interfere with emergency access after project construction. Emergency access to the site would be available through the Sacramento City College campus roadways, which would not be obstructed by the project.

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

No Impact. The proposed project would be constructed adjacent to the parking garage associated with Sacramento City College. The proposed project would not impact parking availability at the garage or elsewhere. Furthermore, the project would not generate an increased demand for parking.

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

No Impact. The proposed project was developed based on the goals and objectives of the City of Sacramento General Plan and is consistent with such. The project supports alternative transportation objectives by providing a safe route for bicycle and pedestrian users to cross the existing light rail and UPRR tracks. It is not anticipated that the project would conflict with light rail schedules or access; therefore there would be no impact.

FINDINGS

The project would have no additional project-specific environmental effects related to transportation and circulation.

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

ENVIRONMENTAL SETTING

The Sacramento Municipal Utility District (SMUD) is the primary provider of electric service in the Planning Area and works closely with the City to ensure a reliable power supply for all residents. Pacific Gas and Electric Company (PG&E) provides natural gas to all customers in the Planning Area. PG&E also owns and maintains some of the City's electrical facilities. Several companies in the Planning Area, including Comcast and SBC Communications, provide telephone and cable services. Solid waste services in the project area are provided by Central Valley Waste Services.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this MND, impacts on public utilities are considered significant if the proposed project would:

- Increase demand for potable water in excess of existing supplies;

- Result in inadequate capacity in the City's water supply facilities to meet the water supply demand, so as to require the construction of new water supply facilities;
- Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments;
- Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts;
- Require or result in either the construction of new solid waste facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Require or result in either the construction of new telecommunication facilities or the expansion of existing telecommunication facilities, the construction of which could cause significant environmental effects.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Draft Master EIR identified numerous policies included in the 2030 General Plan that addressed public utilities (see Draft MEIR, Chapter 6, pages 6.11-28 et seq. (water supply); pages 6.11-54 et seq. (sewer and storm drainage); pages 6.11-72 et seq. (solid waste); pages 6.11-83 et seq. (electricity and natural gas); pages 6.11-92 et seq. (telecommunications)). The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at: http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City determined that there are no other projects within the Policy Area that when combined together along with the project would compound or increase demand for water; there are significant and unavoidable cumulative impacts related to the provision of sewer service; implementation of the Sacramento 2030 General Plan policies ensures a less than significant cumulative impact related to solid waste services; while the demand for energy within the Policy Area would add considerably to the cumulative impacts on energy resources, implementation of the 2030 General Plan policies in conjunction with the continued efforts on behalf of SMUD and PG&E to promote energy efficiency and renewable energy ensure less than significant impacts to electricity and natural gas; and implementation of Sacramento 2030 General Plan polices ensures a less than significant cumulative impact related to telecommunication service. The discussion of public utilities in the 2030 General Plan Master EIR is incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

DISCUSSION OF IMPACTS

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

No Impact. The proposed project would not produce additional wastewater; therefore, there would be no impact.

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

No Impact. Refer to response a) above. The project would have no impact on water or wastewater treatment facilities.

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

No Impact. Construction of the proposed pedestrian/bicycle overcrossing would be limited to the bridge and two end structures. The construction of new storm water drainage facilities adjacent to the project would not be necessary or included in this project. Future development of the Curtis Park Village (east and north of the project site) would likely require expansion of the existing stormwater drainage facilities near the project; however this will be addressed in a separate environmental document prepared for the future development project.

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

No Impact. The proposed project would not have any components that would require water supply.

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

No Impact. The proposed project would not produce additional wastewater; therefore, there would be no impact.

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

Less than Significant Impact. Solid waste generated by the proposed pedestrian/bicycle overcrossing project would be limited to the removal of contaminated soils during project construction. The disposal of any hazardous wastes that may be encountered would occur in accordance with federal, state and local regulations. Disposal would occur at permitted landfills. Therefore, the proposed project would not generate the need for new solid waste facilities and project impacts would be considered less than significant.

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

No Impact. The proposed project would conform to all applicable state and federal solid waste regulations; therefore, there would be no impact.

FINDINGS

The project would have no additional project-specific environmental effects related to public utilities and service systems.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3.17 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 rare or endangered plants or animals, 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 OF IMPACTS

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 rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?*

Less than Significant Impact with Mitigation Incorporated. The proposed project is not anticipated to affect any special-status or wildlife species since none were found to be present within the project area. The area is highly disturbed from past activities and has been planned and approved for future development to the north and east of the proposed project.

The project would not directly or indirectly affect historic resources located within the vicinity of the project site; however, in the event that previously unidentified archaeological or paleontological resources or features are discovered during project construction, implementation of **MM 3.5.1** would ensure that impacts to these resources are less than significant.

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

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. As stated in the question above, the assessment of the significance of the cumulative effects of a project must be conducted in connection with the effects of past projects, other current projects, and probable future projects.

The purpose of the project is to construct a pedestrian/bicycle overcrossing to provide safe passage from the light rail station platform at Sacramento City College across both the light rail and UPRR tracks to the Curtis Park neighborhood to the east. The project would make no significant contribution to cumulatively adverse impacts associated with existing or proposed development projects in the City of Sacramento. Construction of the proposed project, along with other construction in the Sacramento area, would contribute to cumulative environmental impacts; however, the proposed project's contribution would be minimal and impacts are considered less than cumulatively considerable.

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

Less than Significant with Mitigation Incorporated. The proposed project would improve local bicycle and pedestrian access and circulation and provide a safe, off-street means for bicycle and pedestrian users to cross the light rail and UPRR tracks at the project site. The proposed project in and of itself, would not create a significant hazard to the public or the environment.

During construction, a temporary increase in air pollutants may occur due to the use of heavy equipment that generate dust and exhaust emissions and from paints and coatings that may be used. These impacts would be short-term in duration and are considered less than significant under SMAQMD criteria.

The proposed overcrossing structure would create a new visually dominant feature in the project area. Design features would be incorporated into the project, where feasible, to soften the visual appearance of the overcrossing structure and to blend in to the surrounding visual setting. Implementation of **MM 3.1.1** through **MM 3.1.5** would reduce aesthetic impacts of the project to a less than significant level.

Construction activities associated with the project could pose threats to area residents and construction contractors through the use of fuels and chemicals associated with refueling construction equipment, exposure to contaminated soils, and other construction activities which is considered a significant impact unless mitigation is incorporated. Implementation of **MM 3.7.1** through **MM 3.7.6** would reduce these impacts to a less than significant level.

Construction activities associated with the project would include noise and vibration generating activities in excess of established standards which is considered a significant impact unless mitigation is incorporated. Implementation of **MM 3.11.1** through **MM 3.11.2** would reduce impacts to a less than significant level.

4.0 List of Mitigation Measures

4.1 SUMMARY OF MITIGATION MEASURES

AESTHETICS (SECTION 3.1)

MM 3.1.1 Wherever feasible, construction materials and debris should be stored away from highly visible areas, which shall include, but not be limited to, the highly-traveled Sacramento City College campus facilities, such as Hughes Stadium.

MM 3.1.2 Construction lighting should be faced downward and away from traffic lanes and areas where lighting could disturb passing drivers and/or pedestrians.

MM 3.1.3 Design features should be incorporated, where feasible, to soften the visual appearance of the overcrossing structure and to blend into the surrounding visual setting. This may be accomplished using landscaping techniques and aesthetic treatments on the hardscape elements of the project. Where feasible, the following options should be studied and implemented:

- Incorporating planting as a component of project design; and
- Using stamped concrete or other aesthetics treatments on hard structures.

MM 3.1.4 The railing, fencing, and lighting design for the project should be chosen to incorporate features that are consistent with City policies and that meet the desired visual character of the area.

MM 3.1.5 Lighting poles and signs should be designed to minimize reflection to the extent feasible. All surfaces should be painted with an anti-reflective coating or otherwise treated to reduce light reflection.

CULTURAL RESOURCES (SECTION 3.5)

MM 3.5.1 Should a previously unidentified or unanticipated archaeological or paleontological resource or feature be discovered during project construction, the City shall be notified immediately and all construction in the vicinity must stop until a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology or a paleontologist evaluates the finds and recommends appropriate action, as defined in CEQA Guidelines §15064.5(f).

HAZARDS AND HAZARDOUS MATERIALS (SECTION 3.7)

MM 3.7.1 Prior to the start of construction, the construction contractor shall designate staging areas where fueling and oil-changing activities will take place. The staging area(s) shall be reviewed and approved by the City of Sacramento Resident Engineer for the project and the Storm Water Pollution and Prevention Manager prior to the start of construction. No fueling and oil-changing activities shall be permitted outside the designated staging areas. The staging areas, as much as practicable, shall be located on level terrain and away from sensitive land uses such as residences, day care facilities, and schools. The proposed staging areas shall be identified in the Storm Water Pollution Prevention Plan (SWPPP).

MM 3.7.2 Prior to the start of construction, the depth and location of gas pipelines shall be determined and mapped by the appropriate agency and provided to the City to ensure that project construction activities would not disrupt or damage the natural gas pipelines.

MM 3.7.3 Should pole removal or relocation be necessary for the project, the City shall obtain, from the utility owner, data warranting that these transformers are free of PCB contaminated oil. If transformers contain PCBs, they shall be handled and disposed of in accordance with applicable hazardous materials regulations.

MM 3.7.4 For any areas of construction proposed within the Active Union Pacific Yard, a site-specific surface and subsurface investigation for Constituents of Concern shall be completed prior to the start of construction. Investigation, construction, and remediation activities shall be conducted pursuant to DTSC protocols, including DTSC review and concurrence with comprehensive workplans, soil management plans, and health and safety plans. Any reports generated from the investigations shall be submitted to DTSC.

MM 3.7.5 For construction activities in the area of the former U.S. Cold Storage property, a further search of available existing environmental documentation (including work that may have been performed prior to construction of the Sacramento City College parking structure) is recommended to better define the status of site investigation and remediation activities. If documentation is insufficient to determine the presence or absence of hazardous levels of constituents of concern, then a targeted investigation shall be conducted to determine the presence or absence of hazardous levels of constituents of concern.

Investigation, construction, and remediation activities shall be conducted pursuant to DTSC protocols, including DTSC review and concurrence with comprehensive workplans, soil management plans, and health and safety plans. Any reports generated from the investigations shall be submitted to DTSC.

MM 3.7.6 Throughout the project construction area, site specific Phase II soil sampling for hazardous materials shall be conducted in areas where ground disturbing activities would take place as part of project construction. If constituents of concern are identified, applicable regulatory requirements regarding disposal or reuse of contaminated materials shall be followed.

NOISE (SECTION 3.11)

MM 3.11.1 Site preparation and construction activities along the light rail and UPRR tracks (i.e., construction areas closest to sensitive receptors) shall be limited to between the hours of 7:00 a.m. to 6:00 p.m. Monday through Saturday, and 9:00 a.m. to 6:00 p.m. on Sunday. Noise-generating construction equipment maintenance activities shall be limited to the same hours (City of Sacramento, Noise Control Ordinance 8.68.080).

MM 3.11.2 Construction equipment shall be equipped with mufflers, in accordance with manufacturers' specifications. Additionally, equipment staging areas shall be located at the furthest distance possible from nearby residential land uses.

5.0 List of Preparers and References

5.1 LIST OF PREPARERS

PMC®

Melissa D. Logue	Environmental Project Manager
Julie Smith	Environmental Planner
Jeannette Owen	Senior Biologist
John Nadolski	Cultural Resources Specialist
Jonathan Faoro	GIS Technician
Cheryl McKinney	Graphics

5.2 REFERENCES

Blackburn Consulting. Draft Initial Site Assessment: City College Pedestrian Crossing. December 2007.

City of Sacramento. 2030 Draft General Plan. May 2008

City of Sacramento. 2030 General Plan Draft Master Environmental Impact Report. July 2008.

City of Sacramento. Noise Ordinance. City Code Chapter 8.68. http://www.nonoise.org/lawlib/cities/sacramen.htm. Accessed November 26, 2008.

PMC. Historic Properties Survey Report/Archaeological Survey Report for the Sacramento City College LRT Station Pedestrian/Bicycle Crossing Feasibility Study Project. September 2008.

PMC. Natural Environment Study (Minimal Impacts) for the Sacramento City College LRT Station Pedestrian/Bicycle Crossing Feasibility Study Project. September 2008.

PMC. Visual Impact Assessment for the Sacramento City College LRT Station Pedestrian/Bicycle Crossing Feasibility Study Project. October 2008.

Sacramento Air Quality Management District. Guide to Air Quality Assessment. July 2004.

Sacramento Air Quality Management District. Roadway Construction Emission Model, Version 6.3.1. November 2008.

APPENDIX A--SMAQMD ROAD CONSTRUCTION EMISSIONS MODEL

Road Construction Emissions Model, Version 6.3.1

Emission Estimates for -> Sacramento City College LRT Pede Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	8.4	41.3	77.6	58.2	3.2	55.0	14.4	3.0	11.4	6,549.9
Grading/Excavation	9.3	40.8	77.6	58.9	3.9	55.0	15.0	3.6	11.4	6,886.9
Drainage/Utilities/Sub-Grade	5.3	20.9	40.4	57.3	2.3	55.0	13.5	2.1	11.4	3,331.3
Paving	6.1	18.6	34.1	3.0	3.0	-	2.7	2.7	-	2,650.1
Maximum (pounds/day)	9.3	41.3	77.6	58.9	3.9	55.0	15.0	3.6	11.4	6,886.9
Total (tons/construction project)	1.0	4.3	8.2	6.6	0.4	6.2	1.7	0.4	1.3	710.0

Notes: Project Start Year -> 2009
Project Length (months) -> 12
Total Project Area (acres) -> 6
Maximum Area Disturbed/Day (acres) -> 6
Total Soil Imported/Exported (yd^3/day)-> 40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the *sum of exhaust and fugitive dust emissions* shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Sacramento City College LRT Pede Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	Total PM10 (kgs/day)	Exhaust PM10 (kgs/day)	Fugitive Dust PM10 (kgs/day)	Total PM2.5 (kgs/day)	Exhaust PM2.5 (kgs/day)	Fugitive Dust PM2.5 (kgs/day)	CO2 (kgs/day)
Grubbing/Land Clearing	3.8	18.8	35.3	26.5	1.5	25.0	6.6	1.4	5.2	2,977.2
Grading/Excavation	4.2	18.6	35.3	26.8	1.8	25.0	6.8	1.6	5.2	3,130.4
Drainage/Utilities/Sub-Grade	2.4	9.5	18.4	26.0	1.0	25.0	6.2	1.0	5.2	1,514.2
Paving	2.8	8.5	15.5	1.3	1.3	-	1.2	1.2	-	1,204.6
Maximum (kilograms/day)	4.2	18.8	35.3	26.8	1.8	25.0	6.8	1.6	5.2	3,130.4
Total (megagrams/construction project)	0.9	3.9	7.4	6.0	0.4	5.6	1.5	0.4	1.2	644.0

Notes: Project Start Year -> 2009
Project Length (months) -> 12
Total Project Area (hectares) -> 2
Maximum Area Disturbed/Day (hectares) -> 2
Total Soil Imported/Exported ($meters^3$/day)-> 31

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sume of exhaust and fugitive dust emissions shown in columns K and L.

Road Construction Emissions Model
Data Entry Worksheet

Version 6.3.1

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells C10 through C25.

Input Type

Project Name	y College LRT Pedestrian/Bicycle Overcrossing	
Construction Start Year	2009	Enter a Year between 2005 and 2025 (inclusive)
Project Type	3	1 New Road Construction 2 Road Widening 3 Bridge/Overpass Construction
Project Construction Time	12.0	months
Predominant Soil/Site Type: Enter 1, 2, or 3	2	1. Sand Gravel 2. Weathered Rock-Earth 3. Blasted Rock
Project Length	0.25	miles
Total Project Area	5.5	acres
Maximum Area Disturbed/Day	5.5	acres
Water Trucks Used?	1	1. Yes 2. No
Soil Imported	20.0	yd^3/day
Soil Exported	20.0	yd^3/day
Average Truck Capacity	20.0	yd^3 (assume 20 if unknown)

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

Sacramento City College LRT Station Pedestrian/Bicycle Overcrossing Project Mitigation Monitoring and Reporting Program

In January 1989, Assembly Bill 3180 went into effect requiring the City to monitor all mitigation measures applicable to this project and included in the Mitigated Negative Declaration. For this project, mitigation reporting will be performed by the City of Sacramento Department of Transportation in accordance with the monitoring and reporting program developed by the City to implement AB 3180.

This Mitigation Monitoring and Reporting Program is being prepared for the Community Development Department, Environmental Planning Services, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Guidelines, Section 21081.

Project Number: T15065700

Project Name: Sacramento City College LRT Station Pedestrian/Bicycle Overcrossing Project

Project Location: The project is located in the City and County of Sacramento, just north of Sutterville Road between Freeport Boulevard to the west and 24th Street to the east. State Route 99 (SR 99) is located approximately 0.75 mile to the east and Interstate 5 (I-5) is located approximately 1 mile to the west. Within the project area is the Sacramento City College main campus. East and adjacent to the main college campus is a lightrail (LRT) station and Union Pacific Railroad (UPRR) tracks, which run in a north-south direction west of 24th Street, and a maintenance yard. Further east of the project area lies a fallow, undeveloped piece of land, which is planned as a mixed-use infill development.

Project Description: The objective of this project is to improve safety conditions across both the LRT and UPRR tracks adjacent to Sacramento City College and to reduce hazardous conditions along the Sutterville Road overhead. The proposed project includes construction of an overcrossing with ADA compliant ramps on both ends that extends from the lawn area of Sacramento City College, past the parking garage, then over the LRT tracks, UPRR main tracks and maintenance yard to the proposed Curtis Park Village development.

MITIGATION MONITORING AND REPORTING PROGRAM CHECKLIST FOR THE SACRAMENTO CITY COLLEGE LRT STATION PEDESTRIAN/BICYCLE OVERCROSSING PROJECT

Mitigation Measure	Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
			Initials	Date
3.1 AESTHETICS				
3.1.1. Wherever feasible, construction materials and debris should be stored away from highly visible areas, which shall include, but not be limited to, the highly-traveled Sacramento City College campus facilities, such as Hughes Stadium.	Throughout project construction – Mitigation measures shall be included in all construction documents for implementation during construction.	City of Sacramento Department of Transportation and Contractor		
3.1.2. Construction lighting should be faced downward and away from traffic lanes and areas where lighting could disturb passing drivers and/or pedestrians.	Throughout project construction – Mitigation measures shall be included in all construction documents for implementation during construction.	City of Sacramento Department of Transportation and Contractor		
3.1.3. Design features should be incorporated, where feasible, to soften the visual appearance of the overcrossing structure and to blend into the surrounding visual	During Final Design.	City of Sacramento		

setting. This may be accomplished using landscaping techniques and aesthetic treatments on the hardscape elements of the project. Where feasible, the following options should be studied and implemented: • Incorporating planting as a component of project design; and • Using stamped concrete or other aesthetics treatments on hard structures.		Department of Transportation		
3.1.4. The railing, fencing, and lighting design for the project should be chosen to incorporate features that are consistent with City policies and that meet the desired visual character of the area.	During Final Design.	City of Sacramento Department of Transportation		
3.1.5. Lighting poles and signs should be designed to minimize reflection to the extent feasible. All surfaces should be painted with an anti-reflective coating or otherwise treated to reduce light reflection.	During Final Design.	City of Sacramento Department of Transportation		
3.5 CULTURAL RESOURCES				
3.5.1. Should a previously unidentified or unanticipated archaeological or paleontological resource or feature be discovered during project construction, the City shall be notified immediately and all construction in the vicinity must stop until a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology or a paleontologist evaluates the finds and recommends appropriate action, as defined in CEQA Guidelines §15064.5(f).	Throughout groundbreaking activities and project construction – Mitigation measures shall be included in all construction documents for implementation during construction.	City of Sacramento Department of Transportation and Contractor		

3.7 HAZARDS AND HAZARDOUS MATERIALS				
3.7.1. Prior to the start of construction, the construction contractor shall designate staging areas where fueling and oil-changing activities will take place. The staging area(s) shall be reviewed and approved by the City of Sacramento Resident Engineer for the project and the Storm Water Pollution and Prevention Manager prior to the start of construction. No fueling and oil-changing activities shall be permitted outside the designated staging areas. The staging areas, as much as practicable, shall be located on level terrain and away from sensitive land uses such as residences, day care facilities, and schools. The proposed staging areas shall be identified in the Storm Water Pollution Prevention Plan (SWPPP).	Prior to start of construction and during project construction – Mitigation measures shall be included in all construction documents for implementation during construction.	City of Sacramento Department of Transportation and Contractor		
3.7.2. Prior to the start of construction, the depth and location of gas pipelines shall be determined and mapped by the appropriate agency and provided to the City to ensure that project construction activities would not disrupt or damage the natural gas pipelines.	Prior to start of construction – Mitigation measures shall be included in all construction documents for implementation during construction.	City of Sacramento Department of Transportation and Contractor		
3.7.3. Should pole removal or relocation be necessary for the project, the City shall obtain, from the utility owner, data warranting that these transformers are free of PCB contaminated oil. If transformers contain PCBs, they shall be handled and disposed of in accordance with applicable hazardous materials regulations.	Prior to start of construction – Mitigation measures shall be included in all construction documents for implementation	City of Sacramento Department of Transportation and Contractor		

	during construction.			
3.7.4. For any areas of construction proposed within the Active Union Pacific Yard, a site-specific surface and subsurface investigation for Constituents of Concern shall be completed prior to the start of construction. Investigation, construction, and remediation activities shall be conducted pursuant to DTSC protocols, including DTSC review and concurrence with comprehensive workplans, soil management plans, and health and safety plans. Any reports generated from the investigations shall be submitted to DTSC.	Prior to start of construction.	City of Sacramento Department of Transportation and Department of Toxic Substances Control		
3.7.5. For construction activities in the area of the former U.S. Cold Storage property, a further search of available existing environmental documentation (including work that may have been performed prior to construction of the Sacramento City College parking structure) is recommended to better define the status of site investigation and remediation activities. If documentation is insufficient to determine the presence or absence of hazardous levels of constituents of concern, then a targeted investigation shall be conducted to determine the presence or absence of hazardous levels of constituents of concern. Investigation, construction, and remediation activities shall be conducted pursuant to DTSC protocols, including DTSC review and concurrence with comprehensive workplans, soil management plans, and health and safety plans. Any reports generated from the investigations shall be submitted to DTSC.	Prior to start of construction.	City of Sacramento Department of Transportation and Department of Toxic Substances Control		
3.7.6. Throughout the project construction area, site specific Phase II soil sampling for hazardous materials shall be conducted in areas where ground disturbing activities would take place as part of project construction. If constituents of concern are identified, applicable regulatory requirements regarding disposal or reuse of contaminated materials shall be followed.	Prior to start of construction – Mitigation measures shall be included in all construction documents for implementation during construction.	City of Sacramento Department of Transportation and Department of Toxic Substances Control and Contractor		

3.11 NOISE				
3.11.1. Site preparation and construction activities along the light rail and UPRR tracks (i.e., construction areas closest to sensitive receptors) shall be limited to between the hours of 7:00 a.m. to 6:00 p.m. Monday through Saturday, and 9:00 a.m. to 6:00 p.m. on Sunday. Noise-generating construction equipment maintenance activities shall be limited to the same hours (City of Sacramento, Noise Control Ordinance 8.68.080).	During all construction phases of the project – Mitigation measures shall be included in all construction documents for implementation during construction.	City of Sacramento Department of Transportation and Contractor		
3.11.2. Construction equipment shall be equipped with mufflers, in accordance with manufacturers' specifications. Additionally, equipment staging areas shall be located at the furthest distance possible from nearby residential land uses.	During all construction phases of the project – Mitigation measures shall be included in all construction documents for implementation during construction.	City of Sacramento Department of Transportation and Contractor		