

**PUBLIC HEARING: RESOLUTION OF NECESSITY TO ACQUIRE  
ASSESSOR'S PARCEL NUMBER 053-0141-021  
FOR THE SOUTH SACRAMENTO CORRIDOR PHASE 2  
LIGHT RAIL EXTENSION PROJECT**

**STAFF PRESENTATION**

**January 11, 2010**

As indicated in the Issue Paper on this item, in order to acquire property by eminent domain, the governing board of a public agency must adopt a Resolution of Necessity to satisfy statutory and constitutional law. The eminent domain process requires an agency to hold a public hearing regarding its intent to adopt a Resolution of Necessity, give notice to owners of the property, and allow them an opportunity to be heard. Adoption of a Resolution of Necessity requires a two-thirds vote of the Board.

The Eminent Domain Law requires the Resolution of Necessity to contain:

- A) a general statement of the public use for which the property is to be taken and a reference to the statute that authorizes the public entity to acquire the property by eminent domain;
- B) a description of the general location and extent of the property to be taken with sufficient detail for reasonable identification; and
- C) a declaration by the Board that it has found and determined that:
  - 1) the public interest and necessity require the proposed project;
  - 2) the proposed project is planned or located in the manner that will be most compatible with the greatest public good and the least private injury;
  - 3) the property described in the resolution is necessary for the proposed project; and
  - 4) the offer required by Government Code section 7267.2 has been made to the owner or owners of record.

The following information is provided in addition to the Issue Paper and its attachments.

**A) Public Use and RT's Authority to Exercise the Power of Eminent Domain**

The property is needed for the proposed construction and operation of Phase 2 of RT's South Sacramento Corridor Light Rail Extension Project ("the Project"), which will extend the existing RT "Blue Line" light rail service an additional 4.3 miles to the south.

RT is authorized to exercise the power of eminent domain for the acquisition of property for public use by Public Utilities Code sections 102240 through 102243, the Eminent Domain Law, and Section 19 of the California Constitution. RT is authorized to provide transit

service, construct and operate transit facilities, and acquire facilities necessary or convenient for transit service by Division 10, Part 14, Article 5, Chapter 5 of the Public Utilities Code.

### **B) Description of the Property to Be Taken**

The real property at issue (“the Welch Property”) is located at 7915 Ann Arbor Way (Assessor’s Parcel Number 053-0141-021) and constitutes a 6,649 square foot lot, improved with a single family residential structure and attached two-car garage. The property is owned by William Harold Welch (AKA Salih Akil Qawi), Gaye Juanita Welch-Brown, Gladys Gelene Welch, Mattie Lue Welch, and Vermelle G. Welch (deceased). The property is occupied by Mr. Welch. Further description and maps are included in the Issue Paper.

### **C)(1) Public Interest and Necessity Require the Proposed Project**

As approved by the Board on October 27, 2008, Phase 2 of RT’s South Sacramento Corridor Light Rail Project will extend light rail service to the south, adding approximately 4.3 miles of new track (including two flyover structures), four new stations, four traction power substations, a parking structure, and tailtracks. The Project has been included in SACOG’s 2006 Metropolitan Transit Plan and, as identified in the Project’s 2008 Supplemental Final Environmental Impact Statement/ Subsequent Final Environmental Impact Report, will:

- increase mobility through the South Sacramento Area by providing an alternative mode of transportation
- extend transit service to communities which have experienced rapid growth;
- provide greater system connectivity;
- support coordinated transportation and land use planning decisions;
- reduce congestion on regional highways and roads;
- help meet regional air quality goals; and
- stimulate the local economy.

### **C)(2) The Proposed Project is Planned or Located in the Manner that will be Most Compatible with the Greatest Public Good and the Least Private Injury, and**

### **C)(3) The Property Described in the Resolution is Necessary for the Proposed Project**

The Welch property is situated near the western turn of the northernmost portion of the Project along Morrison Creek. The distance from South West Corner of the Welch Property to the toe of the Morrison Creek levee is approximately 22 feet. (Exhibit 1)

At this location, the property is needed to build the required trackway structure which includes sound and retaining walls. These features need to satisfy related General Plan setback requirements; allow for future levee improvements and maintenance; and to provide access to this portion of the rail corridor for operation and maintenance.

The required LRT right-of-way is approximately 35 feet at this location, requiring approximately 1245 square feet of the Welch property, or approximately 1/6<sup>th</sup> of the 6649 square-foot Parcel, including substantially all of the backyard and a portion of the structure.

The initial proposed alignment bridged over the Morrison Creek Levee and Morrison Creek. The design of a bridge required columns to be located within the levee embankment, which would introduce permanent structures within the levee and adjacent areas and impact the integrity of the levee and the ability to maintain it. (Exhibit 2)

In March 2007, the City of Sacramento, Sacramento Area Flood Control (SAFCA) and the Army Corps of Engineers requested that the alignment be moved to the west of the levee which would require acquisition of adjacent residential properties. (Exhibit 3)

In April 2007, SAFCA provided comments to the Supplemental Draft Environmental Impact Statement/ Subsequent Draft Environmental Impact Report (SDEIS/SDEIR) stating that they fully endorse the City of Sacramento and support its position. (Exhibit 4)

In April 2007, the City of Sacramento provided comments to the SDEIS/SDEIR stating that they strongly recommend realigning the new RT tracks so that they will be entirely off the Morrison Creek levee and out of Morrison Creek. (Exhibit 5)

Based on further review, it was initially determined that shifting the alignment to the west to be entirely off the Morrison Creek levee while maintaining an operating speed of 55 mph to obtain the maximum benefit from reduced overall travel time would require the acquisition of 12 homes. Increased operating speeds generally provide the maximum benefit of the Project from reduced overall travel time and limiting the number of train sets needed for the extension.

In May 2007, the State Reclamation Board notified RT that in order to proceed with processing RT's application for approval of the initial bridge proposal over the levee and Morrison Creek, RT would require the endorsement/approval by the City of Sacramento, the local maintaining agency for the affected levee reaches (SAFCA), and the approval of the U.S. Army Corps of Engineers to allow the proposed encroachments. (Exhibit 6)

On June 21, 2007, the City required RT to provide a 15' inspection/maintenance road at the toe of the levee. (Exhibit 7)

On March 3, 2009 the City adopted its Sacramento 2030 General Plan, which supports the City's requirement of the proposed changes in the alignment. The General Plan includes a goal and several governing policies, including:

Goal EC 2.1 - Flood protection. Protect life and property from flooding.

Policy EC2.1.7 - Levee Setbacks for New Development. The City shall prohibit new development within a minimum distance of 50 feet of the landside toe of levees. Development may encroach within this 50 foot area provided that oversized levee improvements are made to the standard levee section consistent with local, regional, State, and Federal Standards.

Policy EC 2.1.11 - Levees Used to Access Development. The City shall prohibit new development from using levees for primary access.

Policy EC2.1.13 - Unobstructed Access to Levees. The City shall provide unobstructed access, whenever feasible, on City-owned land to levees for maintenance and emergencies and require setbacks and easements for access to levees from private property. (Exhibit 8)

In addition, the U.S. Army Corps of Engineers Engineer Manual, EM 1110-2-1913 - Section 8-12 Earth Levee Enlargement, requires sufficient right-of-way for future improvements from the landside toe. (Exhibit 9)

Through several iterations and coordination with the City of Sacramento, SAFCA, and the Corps of Engineers, RT determined that by adjusting the operating speed to 35 mph, the curvature of the alignment could be tightened to minimize impacts to the surrounding community by reducing the numbers of homes that would need to be acquired. The adjustment of the alignment reduced the number of residential properties needed for acquisition to two. This adjustment preserves the operational integrity of the light rail service and meets the local setback requirements without making the project infeasible. (Exhibit 10)

#### **C)(4) RT Has Made the Required Offer to the Owners of Record**

RT provided the owners of the property with a written offer to purchase the property in the amount of RT's approved appraisal of the property's fair market value on August 19, 2009, 30 days after the date of RT's approved appraisal.

The original appraisal for 7915 Ann Arbor Way was completed on May 21, 2009 and included a valuation date of May 5, 2009. An updated appraisal was completed on July 14, 2009 and approved after required review on July 21, 2009.

On August 19, 2009, RT provided its written offers to purchase the property in the amount of its approved appraisal. RT's offer package included:

- 1) an informational pamphlet on the eminent domain acquisition process and the owners' rights under the Eminent Domain Law;
- 2) an Appraisal Summary Statement (which certifies the appraisal and sets the basis for the amount established as just compensation), dated August 18, 2009;
- 3) a copy of the appraisal, and
- 4) a Purchase and Sale Agreement.

The August 19<sup>th</sup> offer was made within 60 days of the revised appraisal date (July 14, 2009), as well within 60 days of the approved appraisal (July 21, 2009).

The August 19<sup>th</sup> offer itself followed a notification process to property owners that began shortly after the Federal Transit Administration issuance of its Record of Decision on the Project in December of 2008. This process included the following:

- General Manager Project Update/Factsheet to Property Owners - **December 2, 2008**

- Notice of Intent to Acquire to Property Owners - **January 22, 2009**
- Invitation to Property Owners Regarding Property Rights - **February 5, 2009**
- Presentation to Property Owners, Susan B. Anthony Elementary School - **February 19, 2009**
- Notice of Intent to Appraise - **April 21 and 28, 2009**
- Right of Entry Agreement to Gaye Welch-Brown - **July 21, 2009**
- Purchase and Sale Agreement to Gaye Welch-Brown - **August 19, 2009**

Separate and apart from the notice related to the acquisition of property, RT had engaged in an extended public process related to the development, environmental review, and approval of the Phase 2 Project, including more than 50 public outreach meetings and presentations. A partial list of public notice and outreach for the Project includes:

- Notice of Intent to Prepare an EIS - **March 8, 2002**
- Notice of Preparation distributed to agencies - **March 2002**
- Public Scoping Meetings - **March 25 and April 11, 2002**
- RT Board Meeting on Locally Preferred Alternative - **August 25, 2003**
- Open House Meetings:
  - May 3, 2003** - Prairie Elementary
  - April 21, 2003** - Union House Elementary
  - November 15, 17, 2004** - Valley School
  - April 18, 2007** - Elk Grove City Hall
- Draft SEIS/SEIR distributed to agencies for review and comment. Notice of availability via direct mailing to addresses within 300 feet of project - **February 2, 2007**
- Draft DSEIS/DSEIR placed on RT web site - **February 2, 2007**
- Publication of availability of DSEIS/DSEIR for 45 days' public review in local special interest papers and newspaper of general circulation - **February 2, 2007**
- Newspaper Publication of Notice of Public Hearing - **February 23, 2007**
- Public Hearing on DSEIS/DSEIR at RT Board Meeting - **March 12, 2007**
- RT Board Meeting to Certify Environmental Documents and Approve Project - **October 27, 2008.**
- Multiple public meetings to discuss stations and station designs - **2009**

On December 18, 2009, pursuant to Code of Civil Procedure 1245.235, RT sent a Notice of Intent to Adopt Resolution of Necessity to Acquire and Notice of Hearing and Right to Appear to each person who appeared on the last equalized county assessment roll for the property.

On January 4, 2010, RT received a Notice of Intent to Appear from one owner, Ms. Gaye Welch-Brown; her letter sets forth several objections to the adoption of the Resolution of Necessity and is contained in the materials for this hearing.

EXHIBITS

- Exhibit 1 Property Description
- Exhibit 2 Alignment Detail (2007)
- Exhibit 3 Multiple Agency Coordination Meeting Minutes March 14, 2007
- Exhibit 4 SAFCA Comments on DSEIS/DSEIR, April 3, 2007
- Exhibit 5 City of Sacramento Comments on DSEIS/DSEIR, April 3, 2007
- Exhibit 6 State Reclamation Board Letter, May 15, 2007
- Exhibit 7 Multiple Agency Coordination Meeting Minutes, June 31, 2007
- Exhibit 8 Sacramento 2030 General Plan, March 3, 2009
- Exhibit 9 U.S. Army Corps of Engineers Engineer Manual, Section 8-12
- Exhibit 10 Alignment Detail (2008)

February 19, 2009

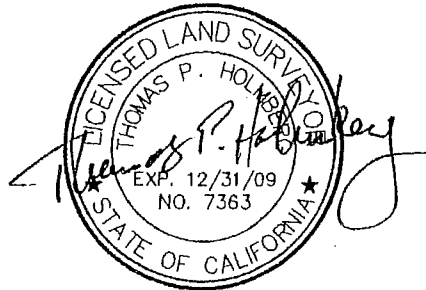
**Exhibit 'A'**

**APN 053-0141-021**

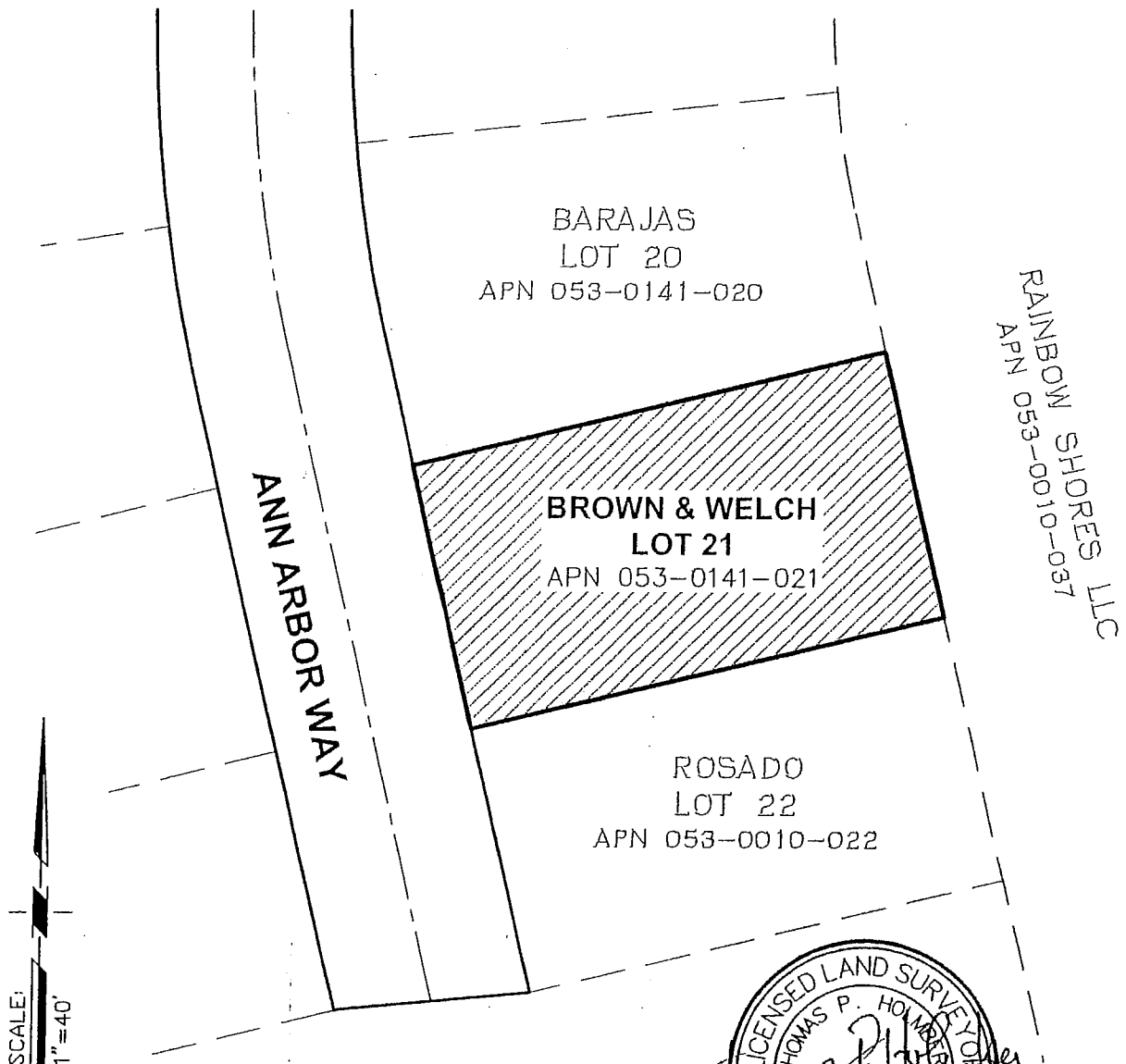
All of the tract of land shown and designated as Lot 21 on the Plat of Southgate Unit No. 3 filed in Book 84 of Maps, at Page 20, Official Records of Sacramento County, located in Section 7 & 8, Township 7 North, Range 5 East, Mount Diablo Meridian, City of Sacramento, Sacramento County, California.

**CONTAINING:** an area of 6,649 square feet, more or less.

The above described tract of land is shown on Exhibit 'B' attached hereto and made a part hereof.



**EXHIBIT 'B'**  
**SOUTHGATE UNIT NO 3**  
 84 MAPS 20, ORSC  
 A PORTION OF SECTIONS 7 & 8, T 7 N, R 5 E, MDM  
 CITY OF SACRAMENTO, SACRAMENTO COUNTY, CALIFORNIA  
 SCALE: 1"=40' FEBRUARY 20, 2009



 AREA: 6,649±SF



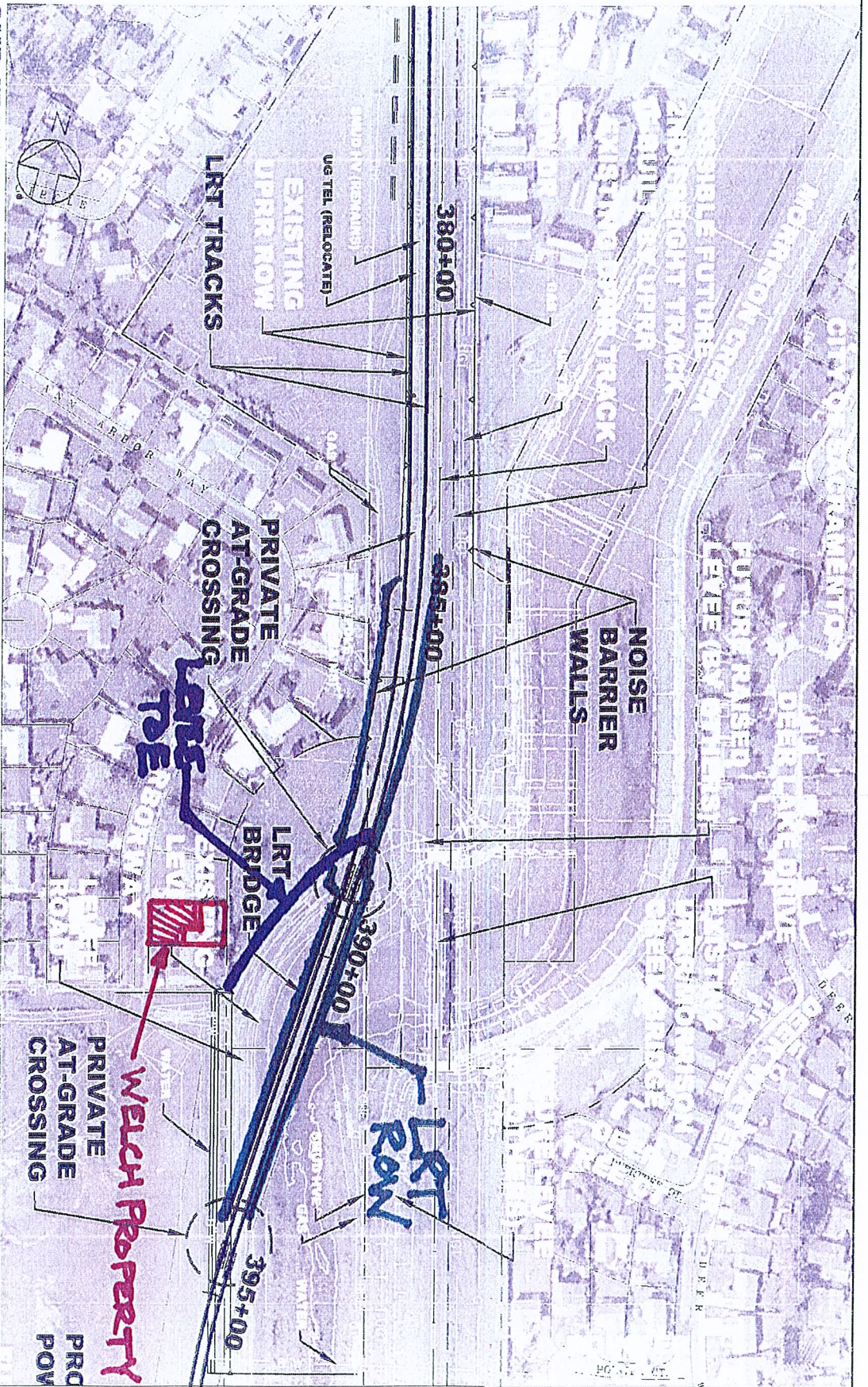
**ANDREGG  
 GEOMATICS**  
 www.andregg.com  
 800-400-7072



**ANDREGG GEOMATICS**  
 11661 BLOCKER DRIVE, SUITE 200, AUBURN, CA 95603  
**SOUTH SACRAMENTO CORRIDOR PROJECT - PHASE 2**  
 APN 053-0141-021  
 SRTD PARCEL S61.04



**SUBJECT TO CHANGE DURING FINAL DESIGN**



**LRT ALTERNATIVE**

LAYOUT PLANS  
FIGURE 2.4-5



### **SRCSD Bufferlands Segment**

Regional. Sanitation (Bryan) - All improvements north of the proposed CRB Extension project alignment including all pedestrian/bike paths, are unlikely to result in any fatal flaws.

RT (Dave W.) - The RT track profile design is based on being above a flood plain elevation of 16.0.

The pedestrian. bridges here, and between Franklin and Center Parkway, would have their travel surface at the same elevation as the top of the proposed flood walls. The bridge beams would be below this elevation. May need to go with a shallow deck structure type such as a truss (premanufactured like you see used on golf courses). The levee road behind the flood wall would be brought up to the pedestrian path elevation and this would require some short retaining walls. The pedestrian path would ramp down to the public street after crossing the levee road.

City Transportation (Ed) - The alignment of the bike/pedestrian path from Deer Lake Drive between the residential area north of Union House Creek and the Franklin station would be preferred along the west and south side of the detention basin.

SAFCA (Grant) - The south levee of Union House Creek is to be removed to match existing grade as part of the current Union House Creek Improvement project to be constructed this year.

City Utilities (Mike and Stu) – All improvements, such as the pedestrian path, should be at least 40 feet away from edge of creek channel. Provide minimum 15 clearance under ped bridges.

**Action Item:** Dave W. to determine vertical clearances proposed under the pedestrian bridges and confirm the structure type needed to accommodate required 15 foot of clearance.

**Action Item:** Brian Wright (Psomas) Investigate the continued need for the detention basin in this area since the south levee of Union House Creek is to be removed to match existing grade.

### **Morrison Creek Segment**

City Utilities (Mike and Stu) - Stated that they do not like the currently proposed LRT alignment and bridge that cuts across the westerly levee in two places and across the corner of Morrison Creek. It was stated that these LRT facilities prevent City Utilities access to the stop log gate across the UPRR track. Also they do not want to see piers located in the levees. This statement also applies to the UPRR Flyover bridge. They would prefer for the alignment to be moved to the west of the levee which would require acquisition of adjacent residential properties.

RT (Diane, Dave and Dave) – Stated access to the stop log gate has been maintained with the new facilities. The top of levee road goes around the bridge abutments and crosses over the tracks at private road crossings.. Also the existing road ramp at the corner of the levee stays in place and is not affected by the LRT project.

Dave M. invited the meeting attendees to submit their comments in writing in response to circulation of the Draft Environmental Document.





Sacramento  
Area Flood  
Control  
Agency

A2: A - 00100

RECEIVED

APR 03 2007

ESD

April 3, 2007

Ms. Diane Nakano  
Assistant General Manager for Engineering  
and Construction  
Sacramento regional Transit District  
1400 29<sup>th</sup> Street, P.O. Box 2110  
Sacramento, CA 95812-2110

SUBJECT: Supplemental Draft Environmental Impact Statement/  
Subsequent Draft Environmental Impact Report  
South Sacramento Corridor Phase 2

Dear Ms. Nakano:

The Department of Utilities, City of Sacramento has prepared and submitted  
extensive comments on this project. We fully endorse the comments made by  
City Utilities and support their position.

Sincerely,

Pete Ghelfi  
Director of Engineering

Office: 916-874-7606  
FAX: 916-874-0239

1007 - 7th Street, 7th Floor  
Sacramento, CA 95814-3407

— Please see responses to City of Sacramento, Department of Utilities letter. RT has in the past and will continue to coordinate closely with SAFCA on the South Sacramento Corridor Phase 2 Project.



RECEIVED

APR 03 2007

ESD

DEPARTMENT OF UTILITIES

ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO

CALIFORNIA

April 3, 2007  
70177:MN:sw

1395 35th AVENUE  
SACRAMENTO, CA  
95822-2911

PH 916-808-1400  
FAX 916-808-1497/1498

Diane Nakano, P.E.  
Assistant General Manager for  
Engineering & Construction  
Sacramento Regional Transit District  
PO Box 2110  
Sacramento, CA 95812-2110

**Subject:** RT's South Sacramento Corridor Phase 2 Project, Supplemental DEIR, January 2007

Thank you for the opportunity to review the supplemental Draft Environmental Impact Statement/ Subsequent Draft Environmental Impact Report, Draft Section 4(f) for the *South Line* project. The City of Sacramento Department of Utilities offers the following comments:

1.) RT's South Line in Morrison Creek, near the UPRR Bridge

Where RT power lines cross the levee or access route to the levee (e.g., access from Ann Arbor Way to Morrison Creek west levee near UPRR bridge), raise power lines to provide minimum vertical clearance of 18 feet, plus any additional clearance required in vicinity of power lines.

Provide access for flood control maintenance equipment to enter Morrison Creek from right bank / west levee downstream of UPRR bridge. Provide minimum vertical clearance of 18 feet, plus any additional clearance required for safety in vicinity of RT power lines.

For RT at-grade crossings of levee crown, in addition to provisions for private road crossing, provide alarm & warning system for RT trains approaching crossings.

Bridge / bridge piers shall not restrict access for maintenance vehicles to Morrison Creek. Bridge piers & bents shall be designed so as not to restrict low flows or flood flows, or cause erosion. RT shall be responsible for repairing any erosion to flood control facilities in vicinity of the bridge piers & bents. Consider paving waterside levee sideslope at bridge abutments and along entire bridge length because of restricted access for levee maintenance equipment.

*This proposed RT bridge will restrict flood control operation, maintenance, inspection and flood fight activities. Consult with California Reclamation Board for criteria for running RT tracks on and/or even "diagonally across" the levee at-grade. The Utility Department, which is responsible for this section of levee maintenance, strongly recommends realigning the new RT tracks so that they will be entirely off (west) of the Morrison Creek levee and out of Morrison Creek.*



CITY OF SACRAMENTO  
DEPARTMENT  
OF UTILITIES

Making a Difference in Your Neighborhood

The LRT alignment has been revised so that it does not now cross the levee. The existing levee access road will cross the LRT alignment and an 18 foot minimum vertical clearance will be provided.

RT has revised the LRT alignment based on comments received from the Department of Utilities, City of Sacramento. As shown on Figure 2.4-5 SFEIS/SFEIR, Volume I, the revised alignment does not impact access into the creek. Therefore no new access into the creek is proposed. A new access road has been provided for flood control maintenance equipment access from Ann Arbor Way. The access road will provide access to the top of existing levee at the current location. Where this road crosses the LRT 18 foot minimum clearance will be provided.

The LRT alignment has been revised so that it does not cross the levee road. The levee access road from Ann Arbor Way will continue to cross the LRT alignment. Given the light and sporadic usage of the access road and the fact that it will not be a public crossing, crossing protection per California Public Utilities Commission Standard No. 1-C (stop sign with Private Railroad Crossing sign) is proposed. Use of active warning devices does not appear to be warranted and if used would present an adverse noise impact to the adjacent residences from the warning bells.

RT has conferred with the Department of Utilities of the City of Sacramento and has revised the LRT alignment at this location so that it will be west of the current levee with no bridge over Morrison Creek or tracks crossing the levee. Rather, the tracks will run west of the existing levee on a "super levee" – a widened levee – to the west of where the bridge had been proposed at the corner of the creek. Once south of this super levee section, the alignment swings out further to the west off the levee right of way. Refer to Figure 2.4-5, Volume I of the SFEIS/SFEIR.

**THE RECLAMATION BOARD**

3310 El Camino Ave., Rm. LL40  
SACRAMENTO, CA 95821  
(916) 574-0609 FAX: (916) 574-0682  
PERMITS: (916) 574-0653

**RECEIVED**

MAY 18 2007

**PARSONS**  
San Francisco, CA

May 15, 2007

Mr. Michael R. Wiley  
Deputy General Manager  
Sacramento Regional Transit District  
1400 29<sup>th</sup> Street  
Sacramento, California 95812-2110

Dear Mr. Wiley;

Application No. 18166

This letter is in regard to your Reclamation Board Application No. 18166 to place engineered fill and overlay with two sets of light rail tracks on the landside slope of the right (west) bank levee of Morrison Creek; construct 490-foot-long and 1,395-foot-long, 31-foot-wide bridges over two crossing of Morrison Creek in the City of Sacramento. In order to proceed with processing your application we need the following information:

1. Submittal of final certified California Environmental Quality Act (CEQA) documents.
2. Endorsement/approval by the City of Sacramento, the local maintaining agency for the affected levee reaches.
3. Approval of the Corps of Engineers to allow the proposed encroachments.

If you have any questions, please contact Sam Brandon, Engineering Associate, Department of Water Resources' Division of Flood Management, at (916) 574-0651.

Sincerely,

A handwritten signature in cursive script that reads "Stephen T. Bradley".

Stephen T. Bradley  
Chief Engineer

bcc: City of Sacramento  
Department of Utilities  
Mr. Dave Schamber  
1395, 35<sup>th</sup> Ave.  
Sacramento, CA 95827



## DRAFT MEETING MINUTES

**PROJECT:** SOUTH SACRAMENTO CORRIDOR PHASE 2 PROJECT  
**RE:** Field Meeting with City Utilities, SAFCA, USACE, Rec. Board in regards to DEIS comments on LRT impacts to levee improvements

**PARSONS NO.:** 644875  
**DATE OF MEETING:** June 21, 2007  
**LOCATION:** Morrison Creek Levee just downstream of UPRR  
**ATTENDEES:** See attached sign in sheet.

- SAFCA says that the LRT alignment/embankment may now need to accommodate a future 4:1 landside slope with a 15' toe road. This governs over previous 50' clearance requirement from existing levee toe provided by City Utilities. Grant Kreinberg handed out a couple of very conceptual typical sections (see attached) to illustrate the possible requirements.
- Per Rec Board any embankment constructed up against a levee will be considered as part of the levee and therefore an inspection road is required at its toe. Therefore a 15' inspection road is required to the outside of the "Super Levee" section even though the Super Levee may be much wider than a levee with a 4:1 slope.
- This is a "Federal Levee" since federal monies were/are being used to construct it. Therefore the USACE has jurisdiction to make sure all proposed improvements meet their requirements now and in the future.
- Any easement executed for the LRT corridor will have a clause that gives SAFCA or USACE the right to have the LRT relocated at the expense of RT if needed for the purposes of accommodating future flood control improvements. For this reason it would be best keep the LRT embankment separate from the levee wherever possible.
- USACE is currently designing the reconstruction of the levee section immediately downstream of UPRR. Included in this will be the new ramp down into the creek. Final design is almost complete and completed design electronic files will be available next week.
- PTG's idea for a replacement ramp coming up parallel to the trackway from the MC Station needs to provide the ability for trucks to turn south (U turn) down the top of levee. This will be very problematic. An alternative ramp design was also discussed at a location next to the current ramp. This ramp would require the taking of one if not two additional homes. Further development of ramp alternatives is needed. City Utilities suggested we might consider a ramp coming over from Albion Way. This would require the cul de sacing of Ann Arbor and the taking of property from the developer that is proposed for housing.
- SAFCA et al will be asking the developer for a new levee ramp south of the MC Station.
- Mansen noted to all that the requirements continue to change from one meeting to the next, and added that it is difficult to plan/design the LRT extension under these circumstances.
- Mansen noted that the 4/1 slope would require additional right-of-way from the Stone Boswell property, adding cost to the LRT extension and possibly making the extension no longer competitive for federal funding.
- Grant Krienberg noted that we seem to be getting close to a resolution.

6-21-07

Edw. Krennberg	Safar	874-8735
David Wenner	PTG	415-490-2421
DAVE MANSEN	"	(415) 490-2496
Ryan Larson	USACE	916 557 7568
→ Megan Nagy	USACE	916 557 7257
→ STEVE BRADLEY	REL. BP.	916-574-0608
DAVID SCHAMBER	CITY UTILITIES	916-808-1423
Mike Nolan for City Utilities		916-808-8915
Jeff Chase	" "	800-6218

Ryan.T.Larson2@.....

# 2030 GENERAL PLAN



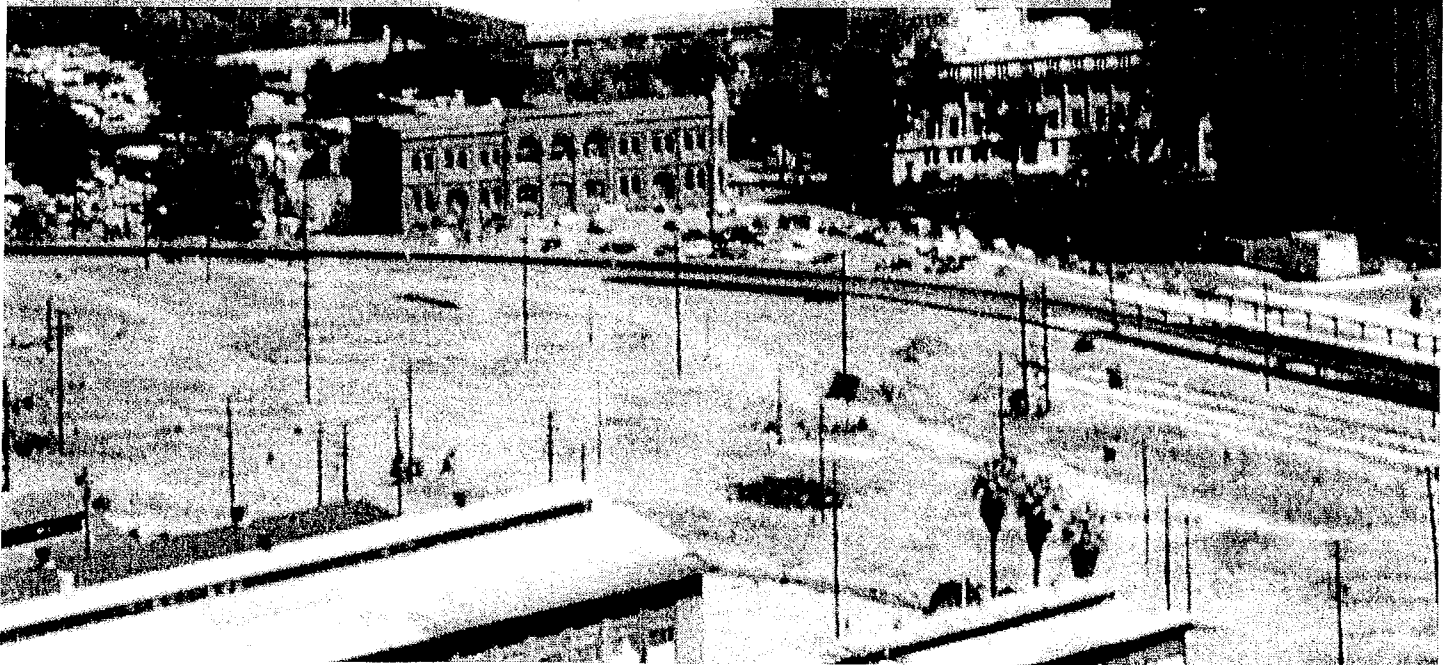
Adopted March 3, 2009

EXHIBIT 8



# CITYWIDE GOALS AND POLICIES

# PART 2



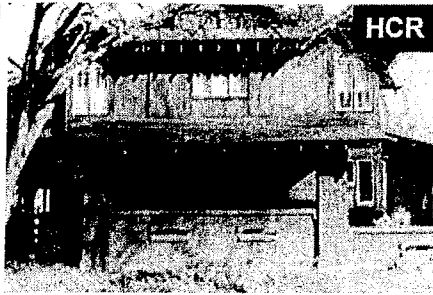
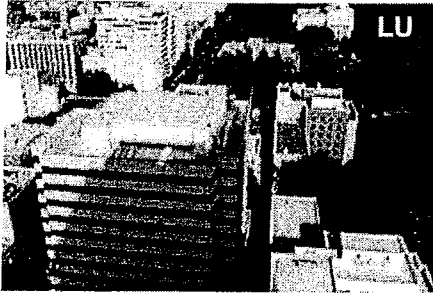
# Introduction

The Citywide Goals and Policies are the heart of the General Plan. The goals and policies flow directly from the Vision & Guiding Principles and address a broad range of topics required by state law and those that address unique local concerns. Policies in Part 3 supplement the Citywide Goals and Policies in Part 2 and are more geographically specific. It should be noted that the abbreviations following each policy refer to the type of tools or actions the City can use to carry out the policies. These eight types of tools and actions are listed below and explained in detail in Part 4, Administration and Implementation.

- Regulation and Development Review (*RDR*)
- City Master Plans, Strategies, and Programs (*MPSP*)
- Financing and Budgeting (*FB*)
- Planning Studies and Reports (*PSR*)
- City Services and Operations (*SO*)
- Inter-governmental Coordination (*IGC*)
- Joint Partnerships with the Private Sector (*JP*)
- Public Information (*PI*)

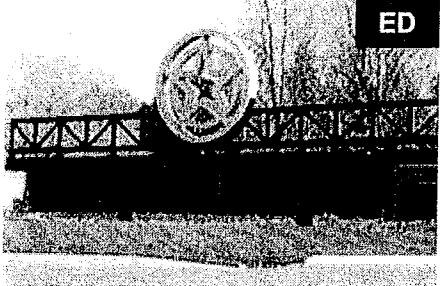


The ten citywide elements of the Sacramento 2030 General Plan are as follows:



Land Use and Urban Design (LU)

Historic and Cultural Resources (HCR)



Economic Development (ED)

Housing (H)  
*Located in a Separately Bound Document*



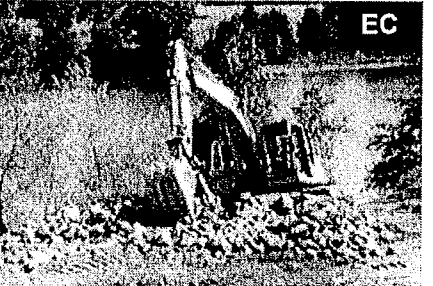
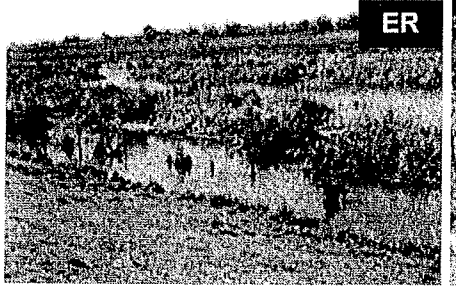
Mobility (M)

Utilities (U)



Education, Recreation, and Culture (ERC)

Public Health and Safety (PHS)




Environmental Resources (ER)

Environmental Constraints (EC)





# ENVIRONMENTAL CONSTRAINTS



The City of Sacramento is committed to the protection of life and property from the risks of natural and man-made hazards. A safe environment enhances residents' quality of life, contributes to a city's livability, and is important for attracting and retaining businesses that help to sustain a thriving economy. Additional policies that address response and disaster preparedness for potential environmental constraints can be found in PHS 4, Emergency Response and Disaster Preparedness.



# Flooding Hazards

Policies in this section protect Sacramento residents by requiring maintenance of existing natural channel floodplain storage areas and by supporting the Sacramento Area Flood Control Agency (SAFCA) in implementing projects that will ultimately provide a 200-year level of flood protection or greater. New development will be evaluated for potential flood hazards prior to approval and will be set back a minimum distance from levees to minimize flooding risk and to allow for future modifications of the system. Flooding evacuation and rescue maps will be updated regularly. In addition, flooding hazard policies provide for protection from dam failure.

Appendix C provides the Flood Insurance Rate Map (FIRM), which shows the Federal Emergency Management Agency (FEMA) flood zones, for the City of Sacramento and the definition of each flood zone.



*H Street Bridge during the 1986 flood event.*

*Photograph courtesy of Sacramento Area Flood Control Agency*

## GOAL EC 2.1

Flood Protection. Protect life and property from flooding.

### Policies

**EC 2.1.1** **Interagency Flood Management.** The City shall work with local, regional, State, and Federal agencies to maintain an adequate information base, prepare risk assessments, and identify strategies to mitigate flooding impacts. *(MPSP/IGC)*

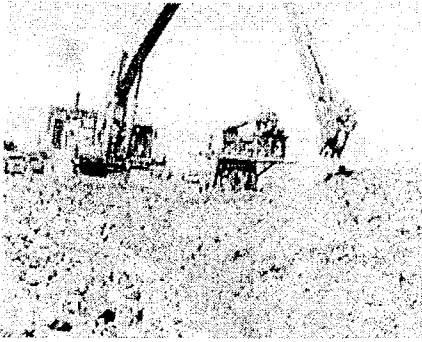
**EC 2.1.2** **Interagency Levee Management.** The City shall work with local, regional, State, and Federal agencies to ensure new and existing levees are adequate in providing flood protection. *(IGC)*

*See U 4, Stormwater Drainage, for additional policies addressing flood control measures.*



*Landside toe of the levee along the American River.*





Improvements to levee infrastructure.

Photograph courtesy of  
Sacramento Area Flood Control Agency

See U 4, Stormwater Drainage, for additional flood hazard policies addressing requirements for new development.

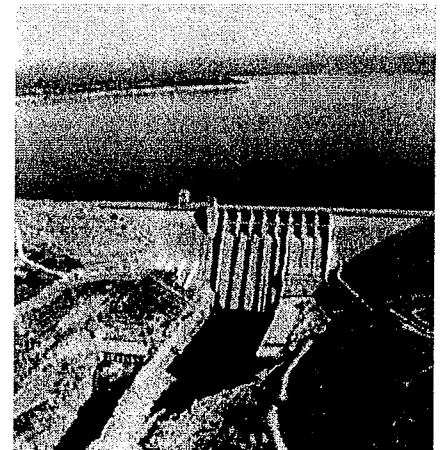


See LU 1, Growth and Change, for additional policies promoting infill development.

See LU 8, Public/Quasi-Public and Special Uses for additional policies addressing critical facilities.

- EC 2.1.3 Funding for 200-year Flood Protection. The City shall continue to cooperate with local, regional, State, and Federal agencies in securing funding to obtain the maximum level of flood protection that is practical, with a minimum goal of achieving at least 200-year flood protection as quickly as possible. *(FB/IGC)*
- EC 2.1.4 Floodplain Storage Maintenance. The City shall encourage the preservation of urban creeks and rivers to maintain existing floodplain storage. *(IGC)*
- EC 2.1.5 Floodplain Requirements. The City shall regulate development within floodplains in accordance with State and Federal requirements and maintain the City's eligibility under the National Flood Insurance Program. *(RDR)*
- EC 2.1.6 New Development. The City shall require evaluation of potential flood hazards prior to approval of development projects. *(RDR)*
- EC 2.1.7 Levee Setbacks for New Development. The City shall prohibit new development within a minimum distance of 50 feet of the landside toe of levees. Development may encroach within this 50-foot area provided that "oversized" levee improvements are made to the standard levee section consistent with local, regional, State, and Federal standards. *(RDR)*
- EC 2.1.8 Dedication of Levee Footprint. The City shall require new development adjacent to a levee to dedicate the levee footprint in fee to the appropriate public flood control agency. *(RDR/IGC)*
- EC 2.1.9 Oversized Levees for Infill Development. The City shall support the construction of "oversized" levees that can increase levee stability and improve site characteristics, recreation, and river access where infill development and redevelopment occurs next to a levee. *(MPSP/IGC)*
- EC 2.1.10 Siting and Design of Critical Facilities. The City shall require that critical facilities and large public assembly facilities be located and designed to mitigate potential flood risk to ensure long term operation. *(RDR/SO/IGC/JP)*
- EC 2.1.11 Levees Used to Access Developments. The City shall prohibit new development from using levees for primary access. *(RDR)*

- EC 2.1.12      **Roadway Systems as Escape Routes.** The City shall require that roadway systems for areas protected from flooding by levees be designed to provide multiple escape routes for residents in the event of a levee failure. *(RDR/MPSP)*
- EC 2.1.13      **Unobstructed Access to Levees.** The City shall provide unobstructed access, whenever feasible, on City-owned land to levees for maintenance and emergencies and require setbacks and easements for access to levees from private property. *(RDR/IGC)*
- EC 2.1.14      **Comprehensive Flood Management Plan.** The City shall maintain, implement, update, and make available to the public the local Comprehensive Flood Management Plan. *(MPSP/IGC)*
- EC 2.1.15      **Flooding Evacuation and Rescue Maps.** The City shall maintain, update, and make available to the public current flood evacuation and rescue maps. *(MPSP)*
- EC 2.1.16      **Flood Risk Notification.** The City shall annually notify owners of residential development protected from flooding by a levee and/or subject to inundation in the event of levee failure of the risk. *(PI)*
- EC 2.1.17      **Deed Notification.** The City shall require, for areas protected by levees, all new developments to include a notice within the deed that the property is protected by flooding from a levee and that the property can be subject to flooding if the levee fails or is overwhelmed. *(RDR/PI)*
- EC 2.1.18      **Flood Insurance.** The City shall encourage all residents protected by levees to purchase flood insurance. *(PI)*
- EC 2.1.19      **Dam Failure.** The City shall plan for the evacuation of people from areas subject to inundation from Folsom, Nimbus, or an Oroville dam failure. *(MPSP/IGC/JP)*



*Folsom Lake Reservoir and dam facility.*

*Photograph courtesy of Sacramento Area Flood Control Agency*

at other convenient locations to serve landowners who have property bordering the levee. Ramps are also provided on some occasions on the riverside of the levee to connect the access road on top of the levee with existing levee traverses where necessary. The actual locations of the ramps should have the approval of the local levee agency which owns and maintains the levee. When used on the riverside of the levee, they should be oriented to minimize turbulence during high water.

*b.* Ramps are classified as public or private in accordance with their function. Public ramps are designed to satisfy the requirements of the levee owner: state, county, township, or road district. Private ramps are usually designed with less stringent requirements and maximum economy in mind. Side-approach ramps should be used instead of right angle road ramps because of significant savings in embankment. The width of the ramp will depend upon the intended function. Some widening of the crown of the levee at its juncture with the ramp may be required to provide adequate turning radius. The grade of the ramp should be no steeper than 10 percent. Side slopes on the ramp should not be less than 1V on 3H to allow grass-cutting equipment to operate. The ramp should be surfaced with a suitable gravel or crushed stone. Consideration should be given to extending the gravel or crushed stone surfacing to the levee embankment to minimize erosion in the gutter. In general, private ramps should not be constructed unless they are essential and there is assurance that the ramps will be used. Unused ramps lead to maintenance neglect.

*c.* Both public and private ramps should be constructed only by adding material to the levee crown and slopes. The levee section should never be reduced to accommodate a ramp.

### *Section III* *Levee Enlargements*

#### **8-11. General**

The term levee enlargement pertains to that addition to an existing levee which raises the grade. A higher levee grade may be required for several reasons after a levee has been constructed. Additional statistical information gathered from recent floodings or recent hurricanes may establish a higher project flood elevation on a river system or a higher elevation for protection from incoming tidal waves produced by hurricane forces in low-lying coastal areas. The most economical and practical plan that will provide additional protection is normally a levee enlargement. Levee enlargements are constructed either by adding additional earth fill or by constructing a flood-wall, "I"-type or "inverted T"-type, on the crown.

#### **8-12. Earth-Levee Enlargement**

*a.* The earth-levee enlargement is normally preferred when possible, since it is usually more economical. This type of enlargement is used on both agricultural and urban levees where borrow sites exist nearby and sufficient right-of-way is available to accommodate a wider levee section.

*b.* An earth-levee enlargement is accomplished by one of three different methods: riverside, straddle, or landside enlargement. A riverside enlargement is accomplished by increasing the levee section generally at the crown and on the riverside of the levee as shown in Figure 8-6a. A straddle enlargement is accomplished by increasing the levee section on the riverside, at the crown, and on the landside of the levee as shown in Figure 8-6b. A landside enlargement is accomplished by increasing the levee section, generally at the crown and on the landside of the levee as shown in Figure 8-6c. There are advantages and disadvantages to each enlargement method that will have to be looked at for each project. The riverside enlargement would be more costly if the riverside slope has riprap protection and it could also be an encroachment for narrow floodways that would impact top of levee designs. Landside enlargements would require additional right-of-way and larger fill quantities for levees with flatter landside slopes. The straddle

enlargement would require the whole levee system to be stripped with work being done on both sides of the levee.

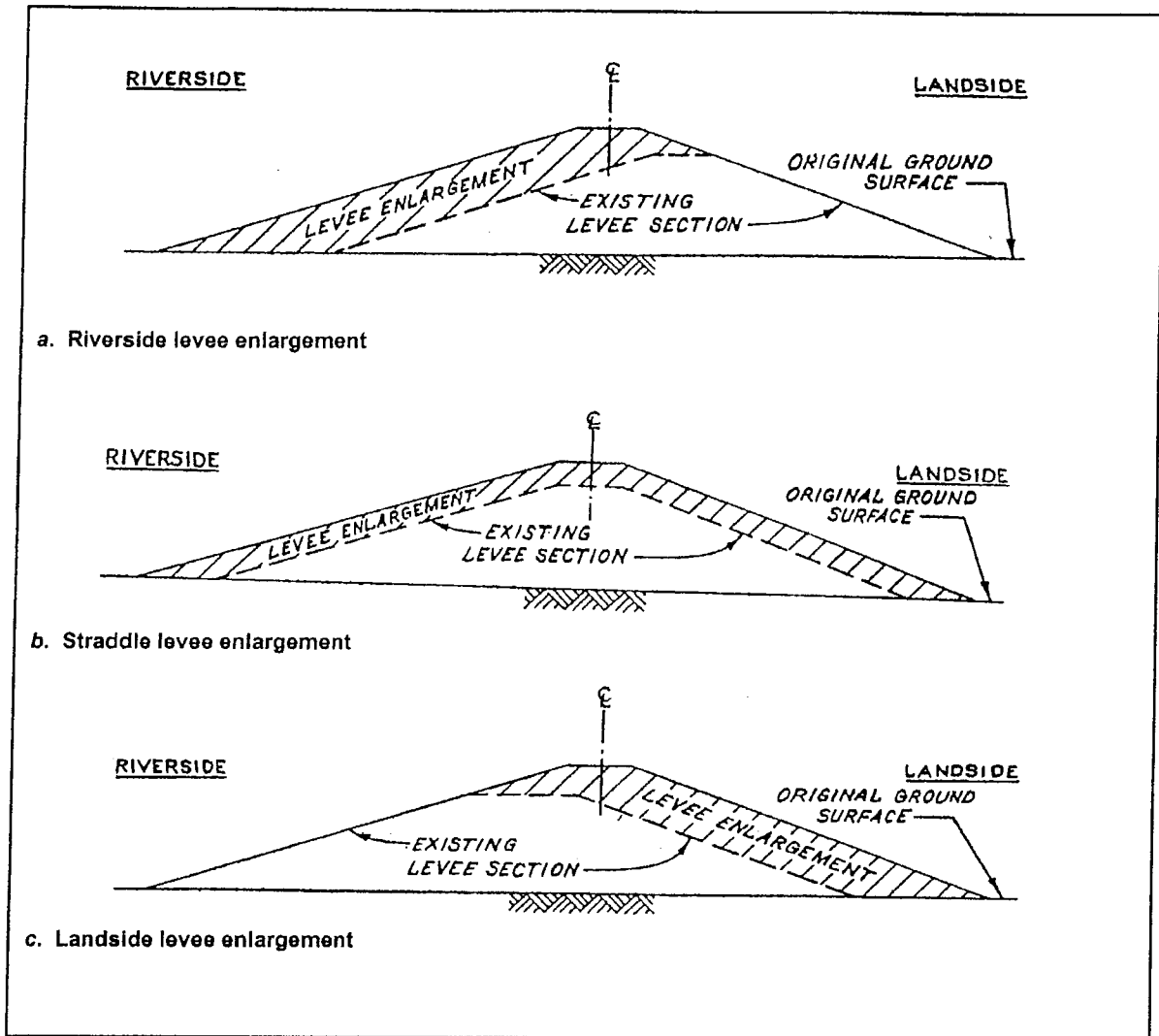


Figure 8-6. Enlargements

c. The modified levee section should be checked for through seepage and underseepage as discussed in Chapter 5 and for foundation and embankment stability as discussed in Chapter 6. Sufficient soil borings should be taken to determine the in situ soil properties of the existing levee embankment for design purposes.

d. An earth-levee enlargement should be made integral with the existing levee. Every effort should be made such that the enlargement has at least the same degree of compaction as the existing levee on which it is constructed. Preparation of the interface along the existing levee surface and upon the foundation should be made to ensure good bond between the enlargement and the surfaces on which it rests. The foundation surface should be cleared, grubbed, and stripped as described in Chapter 6. The existing levee surface upon which the levee enlargement is placed should also be stripped of all low-growing vegetation and organic

topsoil. The topsoil that is removed should be stockpiled for reuse as topsoil for the enlargement. Prior to constructing the enlargement, the stripped surfaces of the foundation and existing levee should be scarified before the first lifts of the enlargements are placed.

### 8-13. Floodwall-Levee Enlargement

*a.* A floodwall-levee enlargement is used, when additional right-of way is not available or is too expensive or if the foundation conditions will not permit an increase in the levee section. Economic justification of floodwall-levee enlargement cannot usually be attained except in urban areas. Two common types of floodwalls that are used to raise levee grades are the I wall and the inverted T wall.<sup>1</sup>

*b.* The I floodwall is a vertical wall partially embedded in the levee crown. The stability of such walls depends upon the development of passive resistance from the soil. For stability reasons, I floodwalls rarely exceed 2.13 m (7 ft) above the ground surface. One common method of constructing an I floodwall is by combining sheet pile with a concrete cap as shown in Figure 8-7. The lower part of the wall consists of a row of steel sheet pile that is driven into the levee embankment, and the upper part is a reinforced concrete section capping the steel piling.

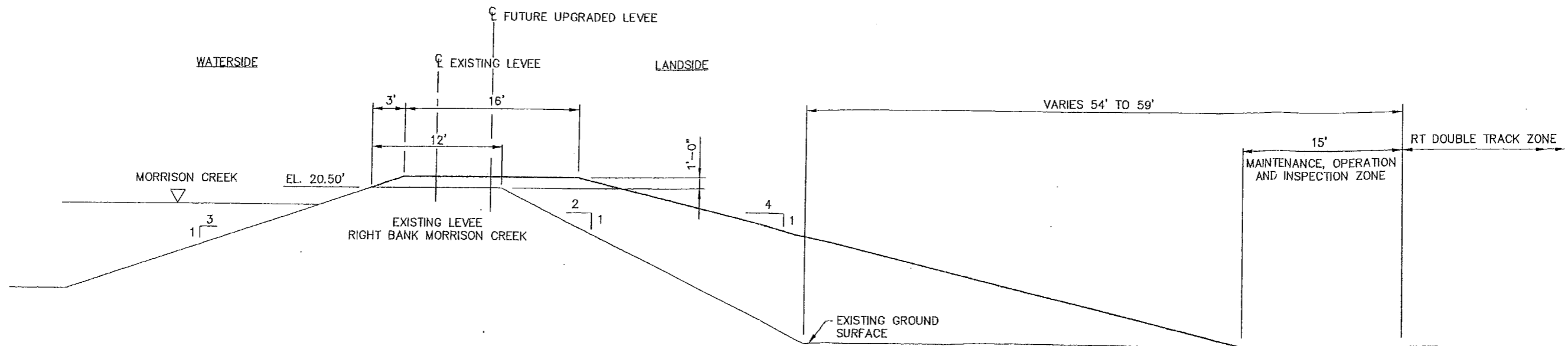
*c.* An inverted T floodwall is a reinforced concrete wall whose members act as wide cantilever beams in resisting hydrostatic pressures acting against the wall. A typical wall of this type is shown in Figure 8-8. The inverted T floodwall is used to make floodwall levee enlargements when walls higher than 2.13 m (7 ft) are required.

*d.* The floodwall should possess adequate stability to resist all forces which may act upon it. An I floodwall is considered stable if sufficient passive earth resistance can be developed for a given penetration of the wall into the levee to yield an ample factor of safety against overturning. The depth of penetration of the I wall should be such that adequate seepage control is provided. Normally the penetration depth of the I wall required for stability is sufficient to satisfy the seepage requirements. For the inverted T floodwall, the wall should have overall dimensions to satisfy the stability criteria and seepage control as presented in EM 1110-2-2502.

*e.* The existing levee section should be checked for through seepage and underseepage as discussed in Chapter 5 and for embankment and foundation stability as discussed in Chapter 6 under the additional hydrostatic forces expected. If unsafe seepage forces or inadequate embankment stability result from the higher heads, seepage control methods as described in Chapter 5 and methods of improving embankment stability as described in Chapter 6 may be used. However, some of these methods of controlling seepage and improving embankment stability may require additional right-of-way for construction which could eliminate the economic advantages of the floodwall in comparison with an earth levee enlargement. As in earth levee enlargements, a sufficient number of soil borings should be taken to determine the in situ soil properties of the existing levee embankment for design purposes.

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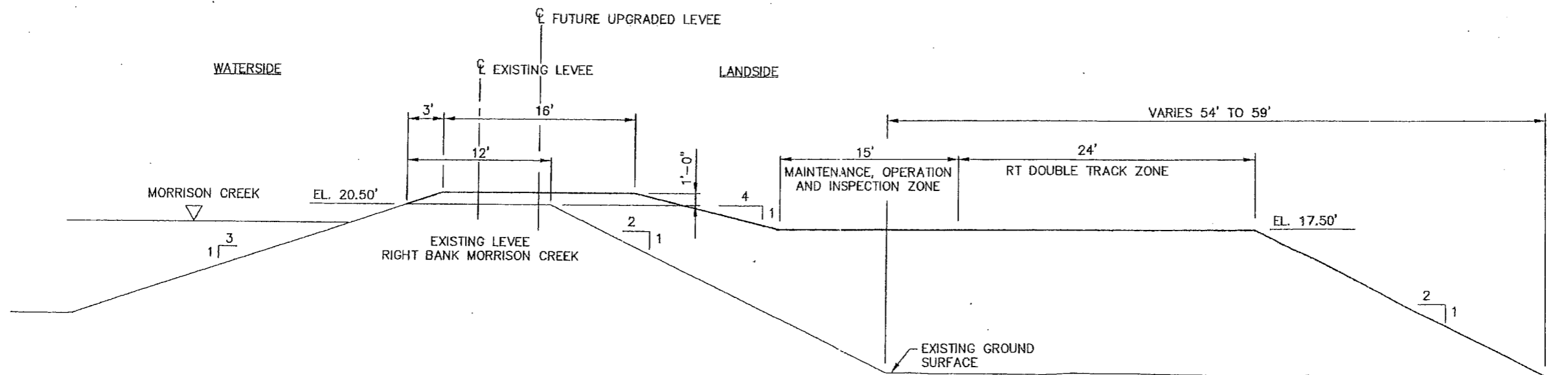
<sup>1</sup> Structural design of crest walls is given in ETL 1110-2-341.



COE FUTURE LEVEE SECTION (ALTERNATIVE 1)

SCALE: 1"=10'

NOTE:  
LEVEE GEOMETRY AND DIMENSIONS ARE BASED ON  
CORPS OF ENGINEERS CURRENTLY PROPOSED  
AND POTENTIALLY LEGISLATED REQUIREMENTS.



COE FUTURE LEVEE SECTION (ALTERNATIVE 2)

SCALE: 1"=10'

NOTE:  
LEVEE GEOMETRY AND DIMENSIONS ARE BASED ON  
CORPS OF ENGINEERS CURRENTLY PROPOSED  
AND POTENTIALLY LEGISLATED REQUIREMENTS.

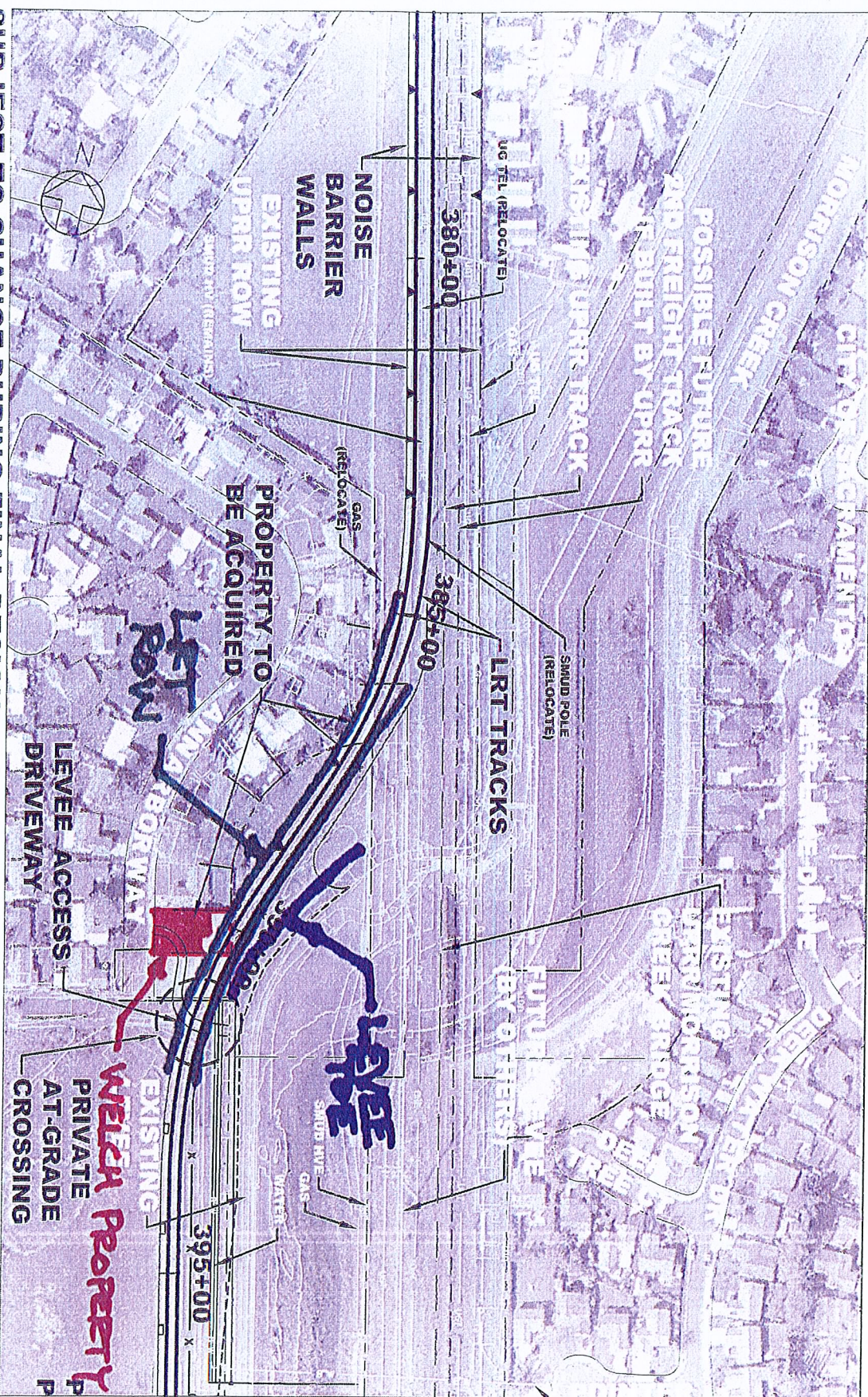
UPRR CROSSING AT MORRISON CREEK TO UNIONHOUSE CREEK





South Sacramento Corridor  
Phase 2 Project

**SUBJECT TO CHANGE DURING FINAL DESIGN**



SCALE: AS SHOWN  
0 50 100 200

**LRT ALTERNATIVE**

LAYOUT PLANS  
FIGURE 2.4.5