RIVERS PHASE II

Final Environmental Impact Report

SCH 2005042018



April 2006

Prepared for:
City of West Sacramento
Community Development Department
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West Sacramento, CA 95691

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1. INTRODUCTION

1. INTRODUCTION

1.1 PURPOSE OF THIS DOCUMENT

This document contains all agency and public comments received on the Draft Environmental Impact Report (Draft EIR) for the Rivers Phase II Project (proposed project). Written comments were received by the City of West Sacramento during the public comment period held from November 21, 2005 through January 4, 2006. This document includes written responses to each comment received on the Draft EIR. The responses correct, clarify, and amplify text in the Draft EIR, as appropriate. Also included are text changes made at the initiative of City staff. These changes do not alter the conclusions of the Draft EIR. This document also includes the following documents:

- An update to the proposed PD-29 text amendments. The original PD-29 text and proposed amendments were included as Appendix C of the Draft EIR. Since publishing the Draft EIR, additional revisions were made to the PD-29 text. This update is included as Appendix A of this document. The additional revisions address additional development standards proposed for the RD and RE designations. At the recommendation of the Planning Commission, the revisions also add ground floor retail (less than 5,000 square feet) to the RE designation. These modifications do not change the conclusions or findings of the Draft EIR.
- Final Water Supply Assessment (WSA). The Draft WSA was included as Appendix J of the Draft EIR. The WSA presents a description and analysis of the available water supply entitlements, water contracts, water rights, and the demand on water supply. The WSA aims to assess whether the City has sufficient water resources to implement the proposed project. The Final WSA incorporates minor text changes to the Draft WSA and is included as Appendix B of this document. These text changes do not change the conclusions or findings of the Draft WSA.

This Final EIR document has been prepared in accordance with the California Environmental Quality Act (CEQA) and together with the Draft EIR (Volumes 1 and 2 (Appendices) constitute the EIR for the proposed project.

1.2 SUMMARY OF PROPOSED PROJECT

Rivers Phase II includes a proposal by West Riverview LLC to develop approximately 68 acres on part of the former Lighthouse Marina and Riverbend project. The Rivers Phase II project would construct one of two scenarios. Scenario A includes the development of a mix of single-family residential units (approximately 626 units), an approximately 12.3-acre K-8 school, two-acre park, and supporting infrastructure. Scenario B would construct an additional 176 residential units on the school site for a total of 802 units if the Washington Unified School District (WUSD) does not construct the school. The proposed project also includes installation of approximately 3,000 linear feet of bank stabilization along the Sacramento River.

Land use actions and entitlements requested of the City of West Sacramento for the proposed project include the following:

- Text amendments to PD-29;
- Small lot vesting tentative subdivision map;
- Approval of the Water Supply Assessment; and
- Approval of a Development Agreement.

1.3 DOCUMENT ORGANIZATION

The Final EIR is organized as follows:

Chapter 1 - Introduction: this chapter summarizes the project under consideration and describes the contents of the Final EIR.

Chapter 2 - Revisions to the Draft EIR: This chapter summarizes the text changes to the Draft EIR. These revisions are in response to comments made on the Draft EIR and/or staff initiated text changes. Changes to the text of the Draft EIR are shown by either a line through the text that has been deleted or double underlined where new text has been inserted. The revisions contain clarification, amplification, and corrections that have been identified since publication of the Draft EIR. The text revisions do not result in a change in the analysis and conclusions presented in the Draft EIR.

Chapter 3 - List of Agencies and Persons Commenting: This chapter contains a list of all of the agencies or persons who submitted comments on the Draft EIR during the public review period, ordered by agency, organization, individual and date.

Chapter 4 - Comments and Responses: This chapter contains the comment letters received on the Draft EIR followed by responses to individual comments. Each comment letter is presented with brackets indicating how the letter has been divided into individual comments. Each comment is given a binomial with the letter number appearing first, followed by the comment number. For example, comments in Letter 1 are numbered 1-1, 1-2, 1-3, and so on. Immediately following the letter are responses, each with binomials that correspond to the bracketed comments.

If a subject matter of one letter overlaps that of another letter, the reader may be referred to more than one group of comments and responses to review all information on a given subject. Where this occurs, cross-references are provided.

Some comments on the Draft EIR do not pertain to CEQA environmental issues. Responses to such comments, though not required, are included to provide additional information. When a comment does not directly pertain to the environmental issues analyzed in the Draft EIR, does not ask a question about the Draft EIR, or does not challenge an element of or conclusion of the Draft EIR, the response will note the comment and provide additional information where possible. The intent is to recognize the comment. Many of comments express opinions about aspects of the proposed project and these are included in the Final EIR for consideration by the decision-makers.

Chapter 5 – Mitigation Monitoring Program: This chapter contains the Mitigation Monitoring Program (MMP) to aid the City in its implementation and monitoring of measures adopted in the EIR.

Appendices: This section contains the Update to the Proposed PD-29 Text Amendments, Final WSA, Hydraulic Analysis of "The Rivers Bank Stabilization Project," and NMFS Section 7 consultation letter.

1.4 PUBLIC PARTICIPATION AND REVIEW

The City of West Sacramento notified all responsible and trustee agencies and interested groups, organizations, and individuals that the Draft EIR on the proposed project was available for review. The following list of actions took place during the preparation, distribution, and review of the Draft EIR:

- A Notice of Preparation (NOP) for an EIR was filed with the State Clearinghouse on April 4, 2005. The 30-day public review comment period for the NOP ended on May 4, 2005.
- A public scoping meeting for the EIR was held on April 14, 2005.
- A Notice of Completion (NOC) and copies of the Draft EIR were filed with the State Clearinghouse on November 21, 2005. An official 45-day public review period for the Draft EIR was established by the State Clearinghouse, ending on January 4, 2006 and a Notice of Availability (NOA) was distributed to interested groups, organizations, and individuals.
- Copies of the Draft EIR were available for review at the City of West Sacramento's Community Development Department, 1110 West Capitol Avenue, West Sacramento, 95691.
- A public hearing to accept comments on the Draft EIR was held by the City's Planning Commission on December 15, 2005.

2. REVISIONS TO THE DRAFT EIR

2. REVISIONS TO THE DRAFT EIR

This chapter contains all of the revisions made to the Draft EIR as a result of responding to comments and at the initiative of the City. The changes clarify, amplify, and/or provide minor technical corrections to the Draft EIR. No new significant information has been added, no new impacts have been identified, and the levels of significance of impacts after mitigation remain unchanged; therefore, recirculation of the Draft EIR is not required pursuant to Section 15088.5 of the CEQA Guidelines.

The following text revisions are shown in the order in which they appear in the Draft EIR (i.e., by page number). A revised summary of impacts and mitigation measures table (Table 2-1 of the Draft EIR) is presented at the end of this chapter. Text changes are shown either by a line through ~~text~~ that has been deleted or double underlined text where new text has been inserted.

Chapter 3 Project Description

Table 3-2, on page 3-6 of the Draft EIR, is revised to read as follows:

TABLE 3-2

PROPOSED HOUSING TYPES AND DWELLING UNITS

Housing Type	Density	PD – 29 Use Area Designation		Scenario A Number of Dwelling Units with School	Scenario B Number of Dwelling Units without School
SFD[1]	7,200 – 18,000 sf[2] lots	RB		18	18
SFD	5,000 sf lots	RC-A		82	82
SFD	2,660 sf	RC-A		120	120
SFA[3]	28 du/acre[4]	RE		344	344
SFA	16 du/acre	RD		62	62
School	22 du/acre[5]	RD		No DUs	176
Total Dwelling Units				**626**	**802**

Notes:
1. SFD = single family detached homes.
2. sf = square foot.
3. SFA = single family attached homes. Housing types would consist of townhouse and stacked flat types with condominium ownership.
4. du/acre = dwelling units per acre.
5. For Scenario B.

Source: Correspondence from Alberto Esquivel, Project Manager, West Riverview LLC to Sandra White, Senior Planner, City of West Sacramento, July 13, 2005.

Figure 3-3, Vesting Tentative Subdivision Map, on page 3-7 of the Draft EIR is revised to note that the lots designated RD and RE single-family attached units would be developed as condominiums. This does not change the conclusions of the Draft EIR. The revised figure is included at the end of this chapter.

The following text is added to page 3-8 of the Draft EIR following the discussion under Roadways and Circulation:

> Bicycle Facilities
>
> The proposed project includes construction of a Class III bike trail at and on Rivercrest Drive that terminates at the west end of Rivercrest Drive. Construction includes the installation of signage and minor transition improvements (ramps/curbing) at the east end of Rivercrest Drive. The Class III trail would transition into a Class I trail on the levee where it would terminate at a lookout point where an informal hiking trail would begin (see the discussion under **Other Project Components – Bank Stabilization**). Construction of the Class I trail includes resurfacing the top of the levee with asphalt paving and construction of a new approximately eight foot paved trail (on City property) from the top of the levee to the lookout point at the river's edge. The continuation of the paved bike trail, west of the west end of Rivercrest Drive, would be constructed by the City at a future date and is not part of this project.

On page 3-13 of the Draft EIR, the following is added to the first sentence of the last paragraph:

> Community Facilities District (CFD) M has been formed to fund the cost for lighting services, street landscaping, and drainage system operation and maintenance.

The second sentence of the first full paragraph on page 3-15 of the Draft EIR is revised to read as follows:

> As previously discussed, a Class III bike trail would transition into a Class I bike trail on the levee where it would terminate at a lookout point where an informal hiking trail would begin. Construction of the Class I bike trail would include resurfacing the top of the levee with asphalt paving and construction of a new approximately eight foot paved trail (on City property) from the top of the levee to the "lookout" point at the river's edge. The continuation of the paved bike trail, west of the west end of Rivercrest Drive, would be constructed by the City at a future date and is not part of this project. A three foot to five foot wide informal hiking trail of decomposed granite or similar material could be included at the termination of the lookout point. The trail would be approximately 4,220 feet in length at approximately elevation 20, between the toe of slope and the area of the proposed bank stabilization work. The precise location of the trail would be determined in the field so as to work around existing vegetation and topography. Figure 3-8a shows the location of the proposed trail and bike path.

Figure 3-8, MBK Levee Typical Cross Section, on page 3-16 of the Draft EIR has been revised to include the proposed informal hiking trail and is included at the end of this chapter. In addition, the figure numbers are revised and the new figure numbers are 3-8a and 3-8b.

The paragraph at the top of page 3-18 of the Draft EIR is revised to read as follows:

> All construction staging areas would be located on the proposed project site. The ~~proposed~~ grading plan proposed for the vesting map is presented in Figure 3-10. Between 30,000 and 70,000 cubic yards of fill, including the 5-acre parcel located east of Fountain Drive, would be ~~Approximately 110,000 cubic yards of fill would be~~ required to accommodate development of the proposed project. A couple of potential sources for the imported fill have been identified.

On page 3-22 of the Draft EIR, the following has been added after the first sentence on the page:

> The City would be required to approve the small lot vesting tentative subdivision map for 62.7 acres of the total 67.8 acre site. The City would also be required to approve any subsequent tentative maps.

Chapter 4.2 Aesthetics

The first sentence of the third full paragraph on page 4.2-10 is revised to read as follows:

> ~~The majority~~ All of the surrounding development is also subject to the PD-29. Therefore, the general character of the proposed development would be similar to that already built in the area.

The sixth sentence of the second full paragraph on page 4.2-11 is revised to read as follows:

> ~~The majority~~ All of the surrounding area, including the proposed residential development site, is subject to PD-29.

Chapter 4.3 Air Quality

The third to last sentence of the only paragraph on page 4.3-9 is revised to read as follows:

> ~~Adoption of the ROP is expected in July of 2005.~~ The ROP was adopted on January 26, 2006.

The first sentence of the last paragraph on page 4.3-15 is revised to read as follows:

> ~~Since~~ The construction activity associated with the proposed project would occur over the course of approximately three years.

The second sentence of the second full paragraph on page 4.3-20 is revised to read as follows:

> ~~In fact, the proposed residential, park and school uses would be less intense than other uses that could be built under the existing General Plan designation and PD-29 zoning, such as a commercial or retail.~~ Under the existing PD designation, medium and high density residential, golf course and commercial uses are allowed. The proposed PD designations would allow for development of low, medium and high residential uses and a school. Commercial and high-density residential uses generally generate more vehicle trips than typical single-family residential development (low and medium density). Therefore, it is anticipated that the proposed project would be less intense than what could conceivably be developed under the existing PD-29 designation.

Chapter 4.4 Biological Resources

The first sentence of the first full paragraph on page 4.4-20 of the Draft EIR is revised to read as follows:

> The bank stabilization project extends from River Mile (RM) 60.5 to RM 61.3 (labeled as "riparian woodland" in Figure 4.4-1), and would include placement of approximately 2.5

acres of ~~l~~ stone dike, bench fill, slope fill, and/or stone armor fill material on the levee slope below the bench where vertical erosion is actively scouring the bank of the Sacramento River.

Mitigation Measure 4.4-2(b) on page 4.4-21 of the Draft EIR is revised to read as follows:

(b) *In-water construction shall occur between July 1st to October 31st which coincides with the summer upstream migration period – the stage of development when fish are least sensitive to disturbance – or such other period deemed appropriate by CDFG, NMFS, or USFWS for protection of federal or State-listed fish species.*

The first sentence of the first full paragraph on page 4.4-22 of the Draft EIR is revised to read as follows:

As part of the 404 Nationwide permit process discussed under Impact 4.4-1, the ~~project applicant~~ Corps has initiated formal consultation both with the NMFS and USFWS for input into the design of bank protection and in-water construction activities for the bank stabilization project.

The following text is added after the second full paragraph on page 4.4-22 of the Draft EIR:

On October 12, 2005, the USFWS concluded its review of the bank stabilization project, and found that, consistent with its previous biological opinions, the project is not likely to adversely affect federally-listed species or adversely modify critical habitat (the letter is included as Appendix F). Thus, Section 7 consultations have been completed with the USFWS.

The following text is added after the fourth full paragraph and preceding the **Mitigation Measure** header on page 4.4-22 of the Draft EIR:

Although construction activities could result in short-term disturbance or loss due of perennial aquatic habitat, once the bank stabilization project is completed, the addition of woody debris and rock would provide long-term habitat for the western pond turtle.

Mitigation Measure 4.4-4(b), on page 4.4-23 of the Draft EIR, is revised to read as follows:

(b) *Should active bird nests be located on the project site, the project applicant~~, in consultation with the City of West Sacramento and CDFG, shall delay construction~~ shall only construct in the vicinity of active nest sites after consultation with the CDFG to determine the appropriate construction period necessary to avoid or minimize disturbance to ~~during the breeding season (approximately March 15 through August 30) while the nest is occupied with~~ adults and/or young during the breeding season (approximately March 15 through August 30). A qualified biologist shall monitor any occupied nest to determine when the nest is no longer used. If the construction cannot be delayed, avoidance shall include the establishment of a non-disturbance buffer zone around the nest site. The size of the buffer zone will be determined in consultation with the CDFG. The buffer zone shall be delineated by highly visible temporary construction fencing.*

Mitigation Measure 4.4-4(d), on page 4.4-24 of the Draft EIR, is revised to read as follows:

(d) *Before any unavoidable loss or disturbance of an active nest site occurs~~, special permits would be required depending on the bird species~~:*

- *~~For a State-listed bird (i.e. Swainson's hawk), the~~ The project applicant shall consult CDFG concerning appropriate avoidance and mitigation measures and if necessary for the incidental take of Swainson's hawk, obtain a CDFG Section 2081 permit. Standard mitigation determined in consultation with CDFG for the loss of an active nest tree generally requires planting 15 trees (a mix of cottonwood, sycamore and valley oaks) and monitoring the success of the trees for five years with a 55 percent success rate.*
- *For any bird covered by the Migratory Bird Treaty Act, the project applicant would consult with the USFWS to determine appropriate mitigation measures.*
- *If any trees along the Sacramento River will be removed that support raptor nests, the tree may only be removed during the non-breeding, non-nesting season.*

Text under the **Mitigation Measure** heading on page 4.4-28 of the Draft EIR is revised to read as follows:

In 1989, the U.S. Army Corps of Engineers required the project proponent for the original Lighthouse Marina project to acquire 193 acres to satisfy the need for off-site mitigation for the entire Lighthouse Marina project. Off-site mitigation was required for the loss of riparian habitat along the Sacramento River, which included compensation for the loss of endangered species habitat at a 3:1 replacement ratio (48 acres) and mitigation for the loss of riparian woodland at a 2:1 replacement ratio (145 acres). Off-site mitigation was completed for 110 acres at Kachituli Oxbow, which is located along the Sacramento River in Yolo County. The remaining 83 acres was satisfied at Mary Lake, which is a small oxbow located at Mary Lake near Knight's Landing in Sutter County.

Based on a review of aerial photographs of Kachituli Oxbow, the Department of Fish and Game has determined that approximately 30 acres of the site is suitable Swainson's Hawk foraging habitat. Kachituli Oxbow has been in existence for approximately 15 years and supports a variety of 40 to 50 tall cottonwoods, valley oaks, at least three species of willow, Oregon ash, black walnut, box elder and elderberries around an artificially constructed oxbow. Due to the completion of this prior mitigation, the Department of Fish and Game has determined that 30 acres of Swainson's Hawk foraging habitat should be credited towards the proposed Rivers Phase II project.

Rivers Phase II includes a total of 68 acres in addition to the bank stabilization component for a total of 70.3 acres. The improved areas of the former golf course total approximately 4.64 acres which does not qualify as Swainson's Hawk foraging habitat. Therefore, the total impacted area is 65.7 acres. Since 30 acres of Swainson's Hawk foraging habitat will be credited towards the project, 35.7 acres of Swainson's Hawk foraging habitat must be mitigated in compliance with the following mitigation strategy.

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

Mitigation Measure 4.4-9, on page 4.4-28 of the Draft EIR, is revised to read as follows:

4.4-9 (A & B) ~~*The developer shall participate in the Yolo County H/NCCP (Habitat/Natural Community Conservation Program) to satisfy the requirement to mitigate the loss of Swainson's hawk foraging habitat. Participation in the H/NCCP shall mean compliance with the mitigation strategies that are in effect prior to the issuance of a grading permit or recordation of the final map (whichever comes first) or implementation of another project specific mitigation plan which is deemed appropriate to the CDFG. In the event that the Final H/NCCP is adopted before development occurs, the developer shall participate in the Final H/NCCP to mitigate for the loss of Swainson's hawk habitat.*~~

The project applicant shall participate in the Yolo County H/NCCP (Habitat/Natural Community Conservation Program) to satisfy the requirement to mitigate the loss of Swainson's Hawk foraging habitat. Participation in the H/NCCP shall mean payment of appropriate interim mitigation fees that are in effect prior to the issuance of a grading permit or recordation of the first final map (whichever comes first) or implementation or another project specific mitigation plan which is deemed appropriate to the CDFG. In the event that the final H/NCCP is adopted before development occurs, the applicant shall participate in the Final H/NCCP to mitigate for the loss of Swainson's Hawk foraging habitat.

The last full sentence on page 4.4-28 of the Draft EIR is revised to read as follows:

The City of West Sacramento alone has ~~seven~~ several development projects in progress or under ~~consideration~~ construction.

The first sentence of the last paragraph on page 4.4-29 of the Draft EIR is revised to read as follows:

As discussed under Impact 4.4-10, ~~seven~~ several projects are in progress or under ~~consideration~~ construction in the City of West Sacramento, many of which are in close proximity to the Sacramento River.

Chapter 4.5 Cultural Resources

Text under the **Mitigation Measure** heading on page 4.5-7 of the Draft EIR is revised to read as follows:

Implementation of the following mitigation measure would reduce ~~the magnitude of this impact, but it would remain *significant and unavoidable* .~~the project's contribution to the above mentioned impact to a *less – than-significant level.*

4.5-3 (A & B) *Implement Mitigation Measure 4.5-1 (a) through (c).*

~~However, p~~ Proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing our understanding of the past environmental conditions and cultures by recording data about

sites discovered and preserving artifacts found. Federal, State and local laws are also in place, as discussed above, that protect these resources; in addition, compliance with Mitigation Measure 4.5-1 (a) through (c) would ensure the proper steps are taken in the event any resources are discovered for the proper handling and treatment. ~~However, even with~~ Compliance with existing regulations and ~~compliance with~~ required mitigation would ensure that the project's contribution to the potential loss of these resources would ~~not~~ be reduced to a level that would be considered less than considerable.

Chapter 4.6 Land Use

Figure 4.6-1, Existing PD-29 Designations, is revised to show the RB designation in the southeast portion of the site. Additionally, the BP/CR designation is changed to BP. The revised figure is included at the end of this chapter.

Table 4.6-1 on page 4.6-6 of the Draft EIR is revised to read as follows:

TABLE 4.6-1

EXISTING AND PROPOSED LAND USE DESIGNATION AND ACREAGE SUMMARY

Existing Land Use Designation	Existing Acreage	Proposed Land Use Designation	Proposed Acreage
RGC	42.1	RC-A	31.8
RE	6.5	RB	4.8
RC	14.1	RD	17.4
BP~~/CR~~	5.1	RE	13.8
Total	**67.8 acres**		**67.8 acres**

Source: EIP Associates, 2005

The third sentence of the first paragraph on page 4.6-9 of the Draft EIR is revised to read as follows:

Also, the General Plan assumes build out of land within the City limits ~~as~~ at some point in time.

Chapter 4.7 Noise

The discussion under **Analysis** for Scenario A on page 4.7-12 of the DEIR is revised to read as follows:

Analysis

Under Scenarios A and B, non-mobile noise sources associated with residential uses would be typical to a residential environment, and no existing stationary noise sources exist in the project vicinity that could impact new receptors. This would result in a ***less-than-significant impact*** for Scenario B.

Under Scenario A, the proposed school could subject residents to maximum noise levels in excess of those allowed. Based on the preliminary school site plan for the proposed project, the school's blacktop area would be located on the western portion of the school site. This would be removed from residential receptors to the north. While some sports fields at the northern portion of the school would be within 100 feet of residences, recess activity would not likely occur at the fence line of the fields. Also, the sports fields would

be large, open spaces that would not attract concentrated numbers of children in any one area. Accordingly, maximum noise levels produced at the sports fields would likely be less than the 75-78 dB associated with blacktop play areas, and the maximum daytime non-transportation noise standards for residential areas would not be exceeded.

To the west, existing multi-family residential uses exist and the currently undeveloped property is zoned for high density, residential uses. The existing residential structures are located approximately 70 feet from the shared property line but over 100 feet from a blacktop area.

Future high-density uses immediately west of the proposed school could conceivably be built within 100 feet of the school's proposed blacktop area. Based on the monitored data, noise levels from children playing on the blacktop during recess could exceed 70 dBA at the exterior of these future residential buildings. Newly constructed buildings have an exterior-to-interior noise attenuation of approximately 30 dBA. Accordingly, if maximum playground noise can reach 75-78 dBA, then housing built within 50 feet of the school blacktop could conceivably be exposed to maximum interior noise levels of 45-48 dBA. These maximum noise levels would be more-or-less instantaneous and periodic. Average noise levels over the course of any daytime hour would be much less than the peak maximum noise levels. Consequently, interior noise levels at future multi-family development would not likely exceed the hourly L_{eq} daytime interior standards shown in Table 4.7-3. However, exterior noise levels could exceed the daytime exterior standards shown in Table 4.7-3. This would be a ***potentially significant impact*** for Scenario A.

~~Playground noise can be mitigated through constructing barriers between the noise source and the nearest receptors, or by creating appropriate distance between noise sources and receptors. Creating barriers is not feasible for the proposed project.~~

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact for Scenario A to a *less-than-significant level*. No mitigation is required for Scenario B.

4.7-2 (A) (a) ~~*School playgrounds shall be sited at least 100 feet from the nearest residence.*~~ *The developer(s) of the future residential uses to the west of the proposed school site shall be required to conduct an acoustical study prior to approval of final site plans to determine exterior and interior noise levels. Appropriate noise attenuation measures shall be recommended and implemented as part of project design, as appropriate.*

Or

(b) *If the proposed school site is developed prior to the future residential uses west of the site, developers of the school shall conduct an acoustical study prior to approval of final site plans to determine exterior playground noise levels. Appropriate noise attenuation measures shall be recommended and implemented as part of the school design, as appropriate.*

Requiring developers of future residential uses west of the school site or the school, depending on which project is developed first, to perform acoustical studies and implement recommended design elements to reduce interior and exterior noise levels would ensure that future residents are not exposed to noise levels in excess of City standards.

Chapter 4.8 Public Services

The first full sentence on page 4.8-1 of the Draft EIR is revised to read as follows:

The WUSD assesses a fee of $~~2.54~~2.95 per square foot for new residential development, paid prior to issuance of building permits, to provide funding for additional school facilities. Current Level I and II fees will be adjusted in early 2006 to reflect an inflationary increase to be approved by the State Allocation Board and to reflect current costs for site acquisition and construction of facilities.

The second sentence of the last full paragraph on page 4.8-1 of the Draft EIR is revised to read as follows:

Station 41 is located at 132-15th Street, Station 43 is located at 1561 Harbor ~~Blvd~~ Boulevard and Station 44 is located at 905 Fremont ~~Blvd~~ Boulevard.

The last full sentence of the last paragraph on page 4.8-1 of the Draft EIR is revised to read as follows:

The Emergency Services Division has ~~45~~ 52 full-time employees.

The first full sentence on page 4.8-2 of the Draft EIR is revised to read as follows:

Average response times vary but are typically characterized by ~~three~~ 4.1 minute response times.

The third sentence of the first full paragraph on page 4.8-2 of the Draft EIR is revised to read as follows:

Staffing includes one captain, an engineer, and one firefighter.

The second sentence of the first paragraph on page 4.8-3 of the Draft EIR is revised to read as follows:

In order to maintain an acceptable response time of five minutes for 95 percent of emergency calls, the City has established a level of service ratio of ~~1.4~~ 1.5 firefighters for every 1,000 residents.

The first sentence of the first paragraph on page 4.8-4 of the Draft EIR is revised to read as follows:

Project development includes residential development under scenarios A and B and a school (under Scenario A) resulting in an increase in population generating the need for additional firefighters in order to meet the City's standard of maintaining ~~1.4~~ 1.5 firefighters per 1,000 people.

The first sentence of the second paragraph on page 4.8-4 of the Draft EIR is revised to read as follows:

> As shown in Table 4.8-2, under Scenario A, project development would generate 1,473 residents which would result in the need for an additional ~~2~~ 2.2 firefighters in order to maintain acceptable service levels.

Table 4.8-2 on page 4.8-4 of the Draft EIR is revised to read as follows:

TABLE 4.8-2

ESTIMATED NEED FOR ADDITIONAL FIREFIGHTERS RESULTING FROM PROJECT DEVELOPMENT

Development Scenario	Standard[1] (Firefighters/Residents)	Number of Residents Generated from Project Development	Additional Firefighters Needed
Scenario A	1.5 ~~1.4~~/1000	1473	~~2~~ 2.2
Scenario B	1.5 ~~1.4~~/1000	1869	~~2.6~~ 2.8

Notes:
1. A Standard ratio of ~~1.4~~ 1.5 Firefighters per 1,000 residents is the threshold established by the City of West Sacramento in order to maintain adequate response times.

Source and Data: EIP Associates, 2005.

The first sentence of the third paragraph on page 4.8-4 of the Draft EIR is revised to read as follows:

> As shown in Table 4.8-2, under Scenario B, project development would generate 1,869 residents which would result in the need for an additional ~~2.6~~ 2.8 firefighters in order to maintain acceptable service levels.

The last sentence of the second paragraph on page 4.8-5 of the Draft EIR is revised to read as follows:

> To further ensure that an adequate level of service will be provided, Section 12.42 of the Municipal Code requires imposition of a Fire Facilities Development Fee. The purpose of the fee is to provide funding for new facilities and equipment that are required as a result of new development. Because project development would result in the need for additional firefighters, equipment, and facilities in order to maintain adequate levels of service at Station #44 and elsewhere, impacts on fire protection services are considered ***potentially significant***.

Mitigation Measure 4.8-1 on page 4.8-5 of the DEIR is revised to read as follows:

> 4.8-1 (A & B)
>
> *(a) The City shall collect sufficient funding for ongoing operations, including the cost of additional fire department personnel associated with the proposed project. The funds shall be generated from property taxes collected from areas that are outside the City's Redevelopment Project Area; sales taxes generated within the City; and pass through payments from the City's Redevelopment Agency to the City's General Fund.*

(b) The Fire Facilities Development Fee shall be paid by the applicant prior to issuance of building permits.

The second paragraph on page 4.8-6 of the Draft EIR is revised to read as follows:

> The Police Department is divided into four divisions: Administration, Support Services/Research and Development, Investigations, and Operations and is responsible for patrolling 23.3 square miles. The Police Department is staffed by ~~67~~ 68 sworn officers and ~~32~~ 35 full-time employees and includes part-time police, parking enforcement officers, clerks, reserve police officers and senior volunteers as well. Statistics for 2004 totaled ~~2,327~~ 1,986 incidents, a figure that was down by two percent from 2003 for the City of West Sacramento.

The first sentence of the fourth paragraph on page 4.8-6 of the Draft EIR is revised to read as follows:

> The West Sacramento Police Department is located at 550 Jefferson ~~Blvd.~~ Boulevard, approximately 1¼ miles from the southeast corner of the project site and approximately two miles from the northwest corner of the project site.

The first sentence of the first full paragraph on page 4.8-7 of the Draft EIR is revised to read as follows:

> In order to maintain an acceptable response time of five minutes for emergency calls, the City has established a level of service ratio of ~~two sworn~~ 1.5 officers per 1,000 residents and ~~additional non-sworn staffing at a ratio of~~ two ~~non-~~ sworn officers for every non-sworn officer.

The last full sentence of the last paragraph on page 4.8-7 of the Draft EIR is revised to read as follows:

> As shown in Table 4.8-3, under Scenario A, project development would generate 1,473 residents which would result in the need for an additional ~~2.9~~ 2.2 sworn officers and ~~5.9~~ 1.1 non-sworn officers.

Table 4.8-3 on page 4.8-8 of the Draft EIR is revised to read as follows:

TABLE 4.8-3

ESTIMATED NEED FOR ADDITIONAL SWORN AND NON-SWORN OFFICERS RESULTING FROM PROJECT DEVELOPMENT

Development Scenario	Standard[1] (Sworn Officers/Residents)	Number of Residents Generated from Project Development	Additional Sworn Officers Needed	Additional Non-Sworn Officers[2] Needed
Scenario A	1.5 ~~2~~/1000	1473	2.2 ~~2.9~~	1.1 ~~5.9~~
Scenario B	1.5 ~~2~~/1000	1869	2.8 ~~3.7~~	1.4 ~~7.5~~

Notes:
1. A Standard ratio of ~~2.0~~ 1.5 Sworn Officers per 1,000 residents is the threshold established by the City of West Sacramento in order to maintain adequate response times.
2. For every sworn officer, the City of West Sacramento Police Department requires additional staffing at a ratio of 2:1 for non-sworn officers.

Source and Data: EIP Associates, 2005.

The second full sentence on page 4.8-8 of the Draft EIR is revised to read as follows:

> As shown in Table 4.8-3, development under Scenario B would generate the need for ~~3.7~~ 2.8 sworn officers and ~~7.5~~ 1.4 non-sworn officers.

The first two sentences of the first full paragraph on page 4.8-8 of the Draft EIR are revised to read as follows:

> The City has a current population of 40,000 with 6~~5~~8 sworn officers serving in the Police Department. ~~Therefore, the Police Department is currently operating below the established staffing level by 15 sworn officers. Additional staffing and/or staff time above the established standard would also be needed in order to continue providing supplemental community services and programs including: education and outreach, bike patrols, school officers, K-9 units, and code enforcement, etc., as the population grows. Although the City's General Plan includes specific policies for maintaining Police Department staffing levels, staffing levels for sworn officers remain below City defined standards due to rapidly increasing residential development within the West Sacramento area. Additionally, the Department experiences a substantial time lag between hiring new sworn officers and actually having those officers on the ground serving the community. Training in accordance with State and local regulations requires a minimum of 18 months.~~

Mitigation Measure 4.8-3, on page 4.8-9 of the Draft EIR, is revised to read as follows:

> 4.8-3 (A & B)
>
> (a) The City shall collect sufficient funding for ongoing operations, including the cost of additional police department personnel associated with the proposed project. ~~Personnel~~ Funding shall be generated from property taxes collected from areas that are outside the City's Redevelopment Project Area; sales taxes generated within the City; and pass through payments from the City's Redevelopment Agency to the City's General Fund. ~~Facility funding shall be generated through payment of the Police Facilities Development Fee. This fee is required prior to issuance of building permits.~~
>
> (b) Facility funding shall be generated through payment of the ~~The~~ Police Facility Development Fee. ~~shall be collected by the City from the applicant~~ This fee shall be paid prior to ~~the~~ issuance of building permits.

Table 4.8-6 on page 4.8-14 of the Draft EIR is revised to read as follows:

TABLE 4.8-6

WASHINGTON UNIFIED SCHOOL DISTRICT ENROLLMENT AND CAPACITY FOR 2004-2005 IN SCHOOLS SERVING THE PROJECT AREA

School	Current Enrollment[1]	Total School Capacity	Available Capacity
Alyce Norman Elementary	~~445~~ 497	~~540~~ 489	~~95~~ 8
Bryte Elementary	~~408~~ 421	~~420~~ 396	~~12~~ 25
Elkhorn Elementary	~~485~~ 498	~~525~~ 555	~~40~~ 57
Golden State Middle School	~~990~~ 1073	~~1161~~ 1323	~~171~~ 250
River City High School	~~1573~~ 1672	~~1701~~ 1895	~~128~~ 223

Notes:
1. Denny Jones, Planning Facilities and Construction Director, written communication, ~~April 22, 2005~~December 22, 2005.

Source: Denny Jones, Planning Facilities and Construction Director, written communication, December 22, 2005.

The second paragraph on page 4.8-14 is revised to read as follows:

> As shown in Table 4.8-6, Alyce Norman Elementary ~~has a remaining capacity of 95 students,~~ and Bryte Elementary School have no remaining capacity. ~~has a remaining capacity of 12 students, and~~ As also shown in Table 4.8-6, Elkhorn Elementary has a remaining capacity of ~~40~~57 students. Golden State Middle School has a remaining capacity of ~~171~~250 students, and River City High School has a remaining capacity of ~~128~~223 students.

The last sentence in the paragraph under **Method of Analysis** on page 4.8-17 of the Draft EIR is revised to read as follows:

> As shown in Table 4.8-6 and described in the environmental setting for this section, district facilities in the project area have remaining capacity for ~~147~~ 24 elementary students, ~~171~~250 middle school students and ~~128~~223 high school students.

The last sentence of the second paragraph on page 4.8-19 of the Draft EIR is revised to read as follows:

> As shown in Table 4.8-6, existing WUSD elementary schools in the project area have an approximate remaining capacity of ~~147~~24 students and the middle school in the project area has a remaining capacity of approximately ~~171~~250 students.

The third sentence in the last paragraph on page 4.8-20 of the Draft EIR is revised to read as follows:

> Existing facilities have a combined available capacity of ~~147~~24 students.

The description under City of West Sacramento Parks Master Plan on page 4.8-23 of the DEIR is revised to read as follows:

> City of West Sacramento Parks Master Plan (~~1993~~ 2003)
>
> The City has identified a goal of becoming the "premier city in the Sacramento Valley." Opportunities for recreational activities are identified as major factors in determining the quality of life within the community and the provision of recreational opportunities is considered a municipal responsibility. ~~The preparation of the Parks Master Plan was required by the City's 1990 General Plan.~~ The first Parks Master Plan was adopted in 1991 and subsequently was updated in 2003. The Parks Master Plan sets out to define a set of achievable steps to implement long-range planning strategies and implementations, as well as short term goals.
>
> ~~The following goals and policies from the City of West Sacramento Parks Master Plan are relevant to the project:~~
>
> ~~*Scenarios A and B*~~
>
> ~~**Goal 1: Develop a high-quality public park system with adequate space and facilities to provide an appropriate mix of recreation activities for the City's residents and workforce.**~~

~~**Policy 4.6:** Park and recreation facilities developed in conjunction with new residential developments shall be eligible for satisfaction of land dedication and park impacts fees required by City Ordinance 90-7 and 90-9, provided that such facilities are in accordance with the locations and standards contained within this Parks Master Plan. Such privately-developed facilities shall be subject to the review and approval of the Director of parks and Community Services.~~

The first sentence under **Standards of Significance** on page 4.8-24 of the DEIR is revised to read as follows:

> For the purpose of this EIR, impacts to parks and ~~R~~recreation are considered significant if the proposed project would:

The fourth paragraph on page 4.8-25 of the Draft EIR is revised to read as follows:

> Project residents would have access to over 40 acres of private parks and open space in the Rivers Project. Additionally, public recreational facilities would be enhanced by the proposed informal hiking trail. However, the private parks would only benefit residents within the development. Since the development is part of a larger community, the project would have significant impacts on the citywide park system. Consequently, the ~~The~~ proposed project would be required to provide parkland dedication or in lieu fees, as established by City standards, for the provision of park and recreation facilities within the community consistent with the City's Parks Master Plan…

The following endnotes on page 4.8-28 and 4.8-30 of the Draft EIR are revised to read as follows:

2. Jim ~~Medech~~ Medich, City of West Sacramento Fire Department, personal communication, March 24, 2005.

5. Jim ~~Medech~~ Medich, City of West Sacramento Fire Department, personal communication, March 24, 2005.

6. Jim ~~Medech~~ Medich, City of West Sacramento Fire Department, personal communication, March 24, 2005.

7. Jim ~~Medech~~ Medich, City of West Sacramento Fire Department, personal communication, March 24, 2005.

8. Eric ~~Ecker~~ Edgar, West Sacramento Fire Department Division Chief, personal communication, April 8, 2005.

37. ~~Callander Associates~~ SmithGroup JJR, *City of West Sacramento Parks Master Plan ~~1993~~2003*, page ~~3~~44.

38. ~~Callander Associates~~ SmithGroup JJR, *City of West Sacramento Parks Master Plan ~~1993~~2003*,, page ~~66~~11.

39. SmithGroup JJR, *City of West Sacramento Parks Master Plan 2003~~, page 44~~*.

40. ~~Callander Associates~~ SmithGroup JJR, *City of West Sacramento Parks Master Plan ~~1993~~2003*,, page ~~62~~42.

Chapter 4.9 Public Utilities

The last paragraph on page 4.9-1 of the Draft EIR is revised to read as follows:

> Wastewater from the proposed project would be treated at the City of West Sacramento Wastewater Treatment Plant located at ~~400 North Harbor Blvd~~ 1991 South River Road. The City's treatment plant, which is a secondary treatment facility, has a current treatment capacity of 7.5 million gallons per day (mgd), with possible expansion to 16 mgd. ~~although the existing facility is expected to reach capacity by 2006.~~

The first paragraph on page 4.9-2 of the Draft EIR is revised to read as follows:

> Monthly average dry flow is equivalent to 5.08 mgd. Daily peak wet weather flows are 9.78 mgd. ~~Secondary wastewater treatment occurs at the wastewater treatment plant located on South River Road facility.~~ Treated effluent is conveyed via a 30-inch pipeline to the Sacramento River, where it is discharged downstream of Clarksburg. Sludge is off-hauled by private contractors to Merced and Solano counties where it is processed for soil amendments and fertilizer.

The first three sentences of the first full paragraph on page 4.9-2 of the Draft EIR are revised to read as follows:

> The City of West Sacramento plans to expand its current service area and grow within the City limits. In order to accommodate the proposed growth, the City plans to discontinue wastewater treatment at the existing wastewater treatment plant and has entered into an agreement with the Sacramento Regional County Sanitation District (SRCSD) to treat and dispose of the City's wastewater. In January 2001, the City of West Sacramento City Council adopted a resolution concluding that obtaining wastewater conveyance and treatment services from the ~~Sacramento Regional County Sanitation District (~~SRCSD~~)~~ was in the City's best interest.

The last sentence on page 4.9-2 of the Draft EIR is revised to read as follows:

> Federal Clean Water Act requirements governing wastewater collection, treatment and discharge are implemented under the National Pollutant Discharge Elimination System (NPDES).

The third sentence of the only paragraph on page 4.9-5 of the Draft EIR is revised to read as follows:

> The City of West Sacramento has entered into an agreement with the SRCSD for wastewater conveyance and treatment and anticipates ~~connection~~ completion by 2006.

The first full paragraph on page 4.9-6 of the Draft EIR is revised to read as follows:

> The proposed wastewater conveyance to the SCRSD has been planned for within the SCRSD Interceptor System Master Plan. The proposed LNWI has been designed to provide adequate conveyance for the greater West Sacramento area, including the project site. The SRWTP has adequate capacity to treat wastewater resulting from the project site, once construction of the LNWI is complete. The City of West Sacramento's Wastewater Treatment Plant is currently at 70 percent capacity and is not expected to reach 90 percent capacity prior to the connection to the SCRSD, which is scheduled for

2007. Therefore, it is anticipated that existing City wastewater treatment plant capacity will be adequate to serve the proposed project until hookup to the SCRSD occurs. ~~Timing of project development would likely coincide with the proposed SCRSD connection; however, the City's treatment plant is expected to reach capacity by 2006 and i~~ If the proposed SCRSD connection does not coincide with the timing of project development, wastewater flows resulting from project development could exceed the capacity of the City's existing facility and expansion would be required. Payment of sewer impact fees will not adequately fund expansion of the treatment facility in a timely manner should development of the project not coincide with City connection to the LNWI. Therefore, impacts are considered ***potentially significant***.

The middle two sentences of the first full paragraph on page 4.9-7 of the Draft EIR are revised to read as follows:

Sanitary ~~S~~sewer provisions defined in the Municipal Code require all development to pay fees as assessed by the City ~~Council~~ to connect to the City's sanitary sewer system. City required sewer impact fees in the form of development fees as assessed by the City ~~Council~~ for sanitary sewer system connections, as well as a monthly sewage use fees, are designed to cover wastewater treatment system improvements for existing facilities and construction of future facilities. ~~and n~~New development must design proposed infrastructure consistent with City standards.

The first sentence of the second full paragraph on page 4.9-8 of the Draft EIR is revised to read as follows:

City required sewer impact fees in the form of development fees as assessed by the City ~~Council~~ for sanitary sewer system connections, in combination with monthly sewage use fees, are designed to cover wastewater treatment system improvements for existing facilities and construction of future facilities.

The second to last sentence of the third paragraph on page 4.9-15 of the Draft EIR is revised to read as follows:

The proposed project would construct new storm water drainage infrastructure in the form of gutters, swales, buried pipelines, ~~roadside ditches,~~ and large capacity pipelines to collect and discharge storm water runoff.

Chapter 4.10 Transportation and Circulation

The last bullet on page 4.10-1 of the Draft EIR is revised to read as follows:

Existing Plus Project (Scenario A) – represents near-term conditions based on existing traffic volumes plus residential and school project related traffic (i.e., 626 residential units and 575 ~~600~~-student school).

Mitigation Measure 4.10-2, on page 4.10-19 of the Draft EIR, is revised to read as follows:

4.10-2 (A & B) *The applicant shall be required to provide public transit facilities including bus turnouts, bus shelters and adequate lighting as required by the City's Engineering Division and the Yolo County Transit Authority. Construction of these facilities shall be phased consistent with the phased development of the project.*

The last paragraph on page 4.10-19 of the Draft EIR is revised to read as follows:

> The proposed project includes construction of a Class III bike trail at and on Rivercrest Drive that terminates at the west end of Rivercrest Drive. Construction includes the installation of signage and minor transition improvements (ramps/curbing) at the east end of Rivercrest Drive. The Class III trail would transition into a Class I trail on the levee where it would terminate at a lookout point. Construction of the Class I trail includes resurfacing the top of the levee with asphalt paving and construction of a new approximately eight foot paved trail (on City property) from the top of the levee to the lookout point at the river's edge. The continuation of the paved bike trail, west of the west end of Rivercrest Drive, would be constructed by the City at a future date and is not part of this project. Planned facilities within the project vicinity, but not proposed as part of the Rivers Phase II project, include bicycle lanes on Fifth Street and a recreational trail along the Sacramento River. The *West Sacramento Bicycle and Pedestrian Path Master Plan* (1995 Addendum) shows bicycle lanes along Cummings Way and Kegle Drive. The Master Plan does not indicate planned bicycle lanes/paths or pedestrian paths within the proposed project area.

Mitigation Measure 4.10-4 on page 4.10-20 of the Draft EIR is revised to read as follows:

> 4.10-4 (A & B)
>
> (a) *All on-~~site~~street and off-~~site~~street parking shall be designed consistent with PD-29, including adopted amendments, the Zoning Ordinance, and the City's Standard Specifications. ~~for residential development.~~*
>
> Scenario A only:
>
> (b) *The school shall be designed to provide sufficient parking consistent with Department of Education Guidelines and shall ~~to~~ accommodate all parking on-site.*

The third paragraph under Impact 4.10-4 on page 4.10-20 is revised to read as follows:

> For Scenario A, the Washington Unified School District would use, as guidance, the site design standards prepared by the ~~California Office of Public School Construction~~ Department of Education. For elementary schools, a ratio of 2.25 parking spaces per teaching station is recommended. The school proposes to include 21 teaching stations, resulting in a minimum requirement of 47 on-site parking spaces. The current design includes a total of 70 spaces. ~~Based on the anticipated number of teachers, support staff, and administrators at the school, the~~ The District would ~~determine~~ confirm the amount of required parking for the proposed school once plans are finalized. ~~Because on-street parking would not be allowed on the west side of Fountain Drive and along Lighthouse Drive, a~~All parking for the proposed school ~~must~~ would be accommodated on-site.

The last paragraph on page 4.10-29 of the Draft EIR is revised to read as follows:

> The increased number of residences in the northeast area of the City, in addition to the residences proposed by the Rivers Phase II project, would increase the demand for transit service provided by the YCTD. ~~result in the need for the YCTD to acquire an~~

~~additional bus. The additional bus would not result in the need for the District to expand or construct new facilities.~~

Chapter 4.11 Water Supply

The second sentence of the first paragraph on page 4.11-14 of the Draft EIR is revised to read as follows:

> The 2005 Water Master Plan Update requires ~~and~~ a new reservoir and pump station (RR&PS01) to be ultimately paid for through impact fees.

Chapter 5.4 Significant and Unavoidable Impacts

Mitigation Measure 4.5-3 is deleted from the list of significant and unavoidable impacts on page 5.4-1.

Chapter 6 Alternatives

The first bullet on page 6-1 of the Draft EIR is revised to read as follows:

- Create ~~an~~ a unique and attractive community with a strong sense of place.

Impact 4.5-3 is removed from the list of impacts under **Cumulative Significant and Unavoidable Impacts** on page 6-2 of the DEIR.

Table 6-1 on page 6-3 of the Draft EIR is revised to read as follows:

TABLE 6-1

SUMMARY COMPARISON OF PROPOSED LAND USES BY ALTERNATIVE

	Proposed Project						Existing Zoning/ No Project Alternative			Estate Parcel/ Reduced Density Alternative		
	Scenario A			Scenario B								
	Acres	Units	sf	Acres	Units	sf	Acres	Units	sf	Acres	Units	sf
Residential	~~55.4~~ 53.5	626		~~66.9~~ 65.8	802		~~20.6~~ 20.5	416		~~54.9~~ 53.5	487	
Office/Commercial							5.1		200,000			
Golf Course							42.2					
School	~~11.5~~ 12.3									~~11.5~~ 12.3		
Park	~~1.0~~ 2.0			~~1.0~~ 2.0						~~1.5~~ 2.0		
Total	~~67.9~~ **67.8**	**626**		**67.8**	**802**		**67.8**	**416**	**200,000**	~~67.9~~ **67.8**	**487**	

Source: EIP Associates, 2005.

Table 6-2 on page 6-3 of the DEIR, is revised to read as follows:

TABLE 6-2

ALTERNATIVE IMPACT COMPARISON

Issue Area	Proposed Project	No Project/No Development Alternative	Existing Zoning/No Action Alternative	Estate Parcel/ Reduced Density Alternative
4.2 Aesthetics	LS	NI	LS	LS
4.3 Air Quality	S	NI	Greater	Greater
4.4 Biological Resources	S	NI	Equal	Equal
4.5 Cultural Resources	~~SU~~S	NI	Equal	Equal
4.6 Land Use	LS	NI	LS	LS
4.7 Noise	SU	NI	Greater	Greater
4.8 Public Services	S	NI	Reduced	Reduced
4.9 Public Utilities	S	NI	Reduced	Reduced
4.10 Transportation and Circulation	S	NI	Greater	Reduced
4.11 Water Supply	S	NI	Reduced	Reduced

Notes:
SU = Significant and Unavoidable – if any impact was identified as significant and unavoidable in the technical analysis.
S = Significant before mitigation – if any impact was identified as significant in the technical analysis.
LS =Less than Significant – if all impacts were identified as less than significant in the technical analysis.
NI = No impact would occur when compared to the proposed project.
Equal = Level of significance is equal to the proposed project.
Greater = Level of significance is greater compared to the proposed project.
Reduced = Level of significance is reduced compared to the proposed project, but not necessarily to a less-than-significant level.
Source: EIP Associates, 2005.

The fourth sentence of the second paragraph on page 6-8 of the Draft EIR has been revised to read as follows:

> Construction and operation of a K-8 school by the WUSD on ~~11.5~~ 12.3 acres of the site is also assumed under this alternative.

Initial Study – IV. Biological Resources

The City of West Sacramento Tree Preservation Ordinance, Section 8.24.090, states "Any application for a development project shall be accompanied by a tree plan." Accordingly, Mitigation Measure 1, on page 21 of the Initial Study, located in Appendix A of the Draft EIR, is revised to read as follows:

> Mitigation Measure 1
>
> ~~The project applicant shall remove and/or conduct maintenance on any trees protected by the Tree Preservation Ordinance consistent with the applicable requirements of that Ordinance, including mitigation and obtaining permits from the City. In addition, on-site trees not being removed shall be protected during construction activities.~~
>
> The project applicant shall submit a tree plan containing the following information:
>
> a. Contour map showing the location, size, species, and condition of all existing trees which are located on the property proposed for development;

b. Identification of those trees which the applicant proposes to preserve and those heritage, landmark, and street trees which are proposed to be removed and the reason for such removal;
c. A description of measures to be followed to ensure survival of heritage, landmark, and street trees during construction;
d. A program for the preservation of heritage, landmark, and street trees during and after completion of the project which shall include the following:
    1. Each tree or group of trees to be preserved shall be enclosed with a fence prior to any grading, movement of heavy equipment, approval of improvement plans or the issuance of any permits and such fence shall be removed following construction but prior to installation of landscaping material;
    2. Fencing shall be located one foot outside of dripline of the tree or trees and shall be a minimum of six feet in height;
    3. Signs shall be posted on all sides of fences surrounding each tree stating that each tree is to be preserved;
    4. Any and all exposed roots shall be covered with a protective material during construction.
e. A program for the replacement of any trees proposed to be removed. Said program shall be in conformance with Section 8.24.084 of the Municipal Code.

Tree permits must be completed for all species 75 inches circumference and over and all oaks 50 inches circumference and over prior to any grading (within 1 foot outside the dripline), trimming, or removal.

Initial Study – VI. Geology and Soils

Mitigation Measure 6, on page 27 of the Initial Study of the Draft EIR, located in Appendix A, is revised to read as follows:

Mitigation Measure 6

The applicant shall prepare a grading, geotechnical, and erosion control plan. The plan shall be submitted to the City of West Sacramento ~~Public Works Department~~ Engineering Division for approval prior to approval of the improvement plans.

Initial Study – VIII. Hydrology and Water Quality

Mitigation Measure 8, on page 36 of the Initial Study of the Draft EIR, located in Appendix A, is revised to read as follows:

Mitigation Measure 8

The applicant shall prepare a comprehensive plan demonstrating how erosion, siltation and contamination of stormwater shall be prevented. The plan shall be submitted to the City of West Sacramento ~~Public Works Department~~ Engineering Division for approval prior to approval of the final map. The plan shall be prepared in accordance with the conditions and requirements of the NPDES General Construction Activity Stormwater Permit.

Mitigation Measure 9, on page 37 of the Initial Study of the Draft EIR, located in Appendix A, is revised to read as follows:

Mitigation Measure 9

The applicant shall prepare a comprehensive plan demonstrating how post-construction stormwater quality measures shall be designed and implemented to protect receiving water quality. The plan shall be submitted to the City of West Sacramento ~~Public Works Department~~ Engineering Division for approval prior to approval of ~~the~~ improvement plans.

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
4.2 Aesthetics					
4.2-1 Development of the proposed project would alter the existing visual character of the project site and its surroundings.	LS	LS	4.2-1 (A & B) *None required.*	NA	NA
4.2-2 Development of the proposed project would contribute to a cumulative alteration of the visual character of the project site viewshed by increasing urban development.	LS	LS	4.2-2 (A & B) *None required.*	NA	NA
4.3 Air Quality					
4.3-1 Construction activity would generate emissions of PM_{10}.	S	S	4.3-1 (A & B) *The project applicant shall incorporate the following requirements into construction documents.* • *Soil stabilizers shall be applied to inactive areas.* • *Ground cover shall be replaced quickly in disturbed areas.* • *Exposed surfaces shall be watered three times daily.* • *All stock piles shall be covered with tarps.* • *All haul roads shall be watered twice daily.* • *Speed shall be reduced on unpaved roads to less than 15 miles per hour.*	LS	LS
4.3-2 Construction of the proposed project would generate the ozone precursors ROG and NO_x.	S	S	4.3-2 (A & B) *The project applicant shall incorporate the following requirements into construction documents.* • *Use a lean-NO_x catalyst in all applicable heavy-duty diesel equipment.* • *Ensure that all heavy-duty equipment engines are tuned and in proper working order.*	SU	SU
4.3-3 Construction of the proposed project would require diesel-fueled equipment that would emit diesel particulate matter.	LS	LS	4.3-3 (A & B) *None required.*	NA	NA

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
4.3-4 Operation of the proposed project would generate ROG, NO_x, and PM_{10}.	S	S	4.3-4 (A & B) (a) *No wood stoves shall be installed in new residences in the proposed project.* (b) *SMAQMD Guide Mitigation Measure 24: Install only natural gas fireplaces. (1%)* Scenario B only: (c) *The Proposed Project shall ensure that Class II bike lanes are included as a component of the Project. (1%)*	LS	LS
4.3-5 Traffic associated with the proposed project would increase concentrations of CO at surrounding intersections.	LS	LS	4.3-5 (A & B) *None required.*	NA	NA
4.3-6 The proposed project would add to the cumulative amount of ozone precursors in the Sacramento Ozone Nonattainment Area.	LS	LS	4.3-6 (A & B) *None required.*	NA	NA
4.3-7 Traffic generated by the proposed project would contribute to cumulative CO levels at nearby intersections.	LS	LS	4.3-7 (A & B) *None required.*	NA	NA

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
4.4 Biological Resources					
4.4-1 Construction of the proposed bank stabilization project would result in the filling or adverse modification of "waters of the U.S."	PS	PS	4.4-1 (A & B) (a) *The project applicant shall obtain all appropriate permits prior to construction of the project, including a Section 404 Wetlands Fill Permit from the Corps, a Section 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board, and a Streambed Alteration Agreement (SBAA) from CDFG.* (b) *Water quality within the Sacramento River along the area of effect shall be protected using rigorous erosion control techniques during construction of the bank stabilization project. Floating silt barriers around the perimeter of all in-water construction shall be properly installed and maintained during the duration of the project to ensure that turbidity levels remain at a threshold considered acceptable by the Central Valley Regional Water Quality Control Board.*	LS	LS
4.4-2 Construction of the proposed bank stabilization project could result in impacts to fisheries resources in the Sacramento River.	PS	PS	4.4-2 (A & B) *The project applicant shall consult with NMFS and USFWS to determine the extent and severity of impacts to fisheries resources, along with the implementation of appropriate mitigation measures. The following or equally effective measures shall be required.* (a) *River-side construction using barges to minimize impacts to existing streambank and riparian habitat* (b) *In-water construction shall occur between July 1st to October 31st, which coincides with the summer upstream migration period – the stage of development when fish are least sensitive to disturbance – or such other period deemed appropriate by CDFG, NMFS, or USFWS for protection of federal or State-listed fish species.*	LS	LS

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			(c) *On-site conservation for rock placement shall be implemented as phased construction begins. As-built plans shall include the following, or equally effective mitigation measures:* i. *a diked bench installed to provide shallow water habitat;* ii. *collateral large woody debris anchored along the diked bench;* iii. *the diked bench designed to allow for frequent flooding during the winter through spring rainy season to create shallow-water habitat;* (d) *Conservation values managed for the life of project.*		
4.4-3 Construction of the proposed bank stabilization project could result in the loss of western pond turtles or their habitat.	PS	PS	4.4-3 (A & B) *The project applicant shall retain a qualified biologist to monitor construction activities along the bank stabilization project site to ensure that no western pond turtles are injured or killed during the construction of the proposed project. Any turtles found in or near the construction zone that could potentially be injured or killed as a result of construction activities should be relocated to an appropriate location (i.e., an area of suitable habitat) that is a minimum of 100 feet downstream of the construction zone.*	LS	LS
4.4-4 Construction of the proposed project could result in the direct loss or disturbance of nesting birds.	PS	PS	4.4-4 (A & B) (a) *The project applicant shall retain a qualified biologist to conduct pre-construction breeding-season surveys (approximately March 15 through August 30) of the project site and vicinity during each calendar year that construction is planned to begin, in consultation with the CDFG. Phased construction procedures are planned for the proposed project; the results of the above survey shall be valid only for the season when it is conducted.*	LS	LS

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TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			A pre-construction survey report shall be submitted to the City of West Sacramento that includes, at a minimum: • *A description of methodology including dates of field visits, the names of survey personnel with resumes, and a list of references cited and persons contacted.* • *A map showing the location(s) of any bird nests observed on the project site.* (b) *Should active bird nests be located on the project site, the project applicant shall only construct in the vicinity of active nest sites after consultation with the CDFG to determine the appropriate construction period necessary to avoid or minimize disturbance to adults and/or young during the breeding season (approximately March 15 through August 30). A qualified biologist shall monitor any occupied nest to determine when the nest is no longer used. If the construction cannot be delayed, avoidance shall include the establishment of a non-disturbance buffer zone around the nest site. The size of the buffer zone will be determined in consultation with the CDFG. The buffer zone shall be delineated by highly visible temporary construction fencing.* (c) *No disturbances (e.g. heavy equipment operation, cranes or draglines, rock-crushing activities) or other project related activities (such as crew and equipment parking on site) which may cause nest abandonment or forced fledging, should be initiated within ¼-mile (buffer zone) of an active nest between March 1 – September 15 or until August 15 if a Management Authorization or Biological Opinion is obtained from the CDFG.*		

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			(d) *Before any unavoidable loss or disturbance of an active nest site occurs:* • *The project applicant shall consult CDFG concerning appropriate avoidance and mitigation measures and if necessary for the incidental take of Swainson's hawk, obtain a CDFG Section 2081 permit. Standard mitigation determined in consultation with CDFG for the loss of an active nest tree generally requires planting 15 trees (a mix of cottonwood, sycamore and valley oaks) and monitoring the success of the trees for five years with a 55% success rate.* • *For any bird covered by the Migratory Bird Treaty Act, the project applicant would consult with the USFWS to determine appropriate mitigation measures.* • *If any trees along the Sacramento River will be removed that support raptor nests, the tree may only be removed during the non-breeding, non-nesting season.* (e) *Active nest trees that would not be removed but are in close proximity to construction activities shall be monitored weekly to determine if construction activities were disturbing the adult or young birds, until the birds left the nest.*		
4.4-5 The proposed bank stabilization project could result in the loss or degradation of rare plant populations.	PS	PS	4.4-5 (A & B) *The project applicant shall retain a qualified biologist to conduct focused surveys within the project site for rose-mallow, Sanford's arrowhead, and northern California black walnut during the appropriate time of year (April through October). If none of these species are located during the surveys, no further mitigation would be required.*	LS	LS

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			If any special-status plant species are located during the surveys, the project applicant shall implement seed collection and/or transplanting if necessary.		
4.4-6 The proposed bank stabilization project could result in the loss and/or degradation of riparian habitat.	PS	PS	4.4-6 (A & B) *Prior to project construction, the project applicant shall prepare a tree report documenting the number and species of trees present within the proposed bank stabilization project, and those trees to be impacted and/or removed from within the riparian woodland. This report and a revegetation plan shall be submitted to and approved by CDFG as part of the Streambed Alteration Agreement.*	LS	LS
4.4-7 The proposed project could disrupt wildlife migratory corridors along the Sacramento River corridor.	LS	LS	4.4-7 (A & B) *None required.*	NA	NA
4.4-8 Development of the proposed project could result in the loss of potential habitat for the valley elderberry longhorn beetle.	PS	PS	4.4-8 (A & B) (a) *All elderberry shrubs to be avoided during construction of the bank stabilization project shall be encircled by high visibility exclusionary fencing, at a minimum distance of 20 feet from the dripline of the elderberry shrubs to be avoided.* (b) *The project proponent shall conduct Worker Environmental Awareness Program (WEAP) training for construction crews (primarily crew and construction foreman) before construction activities begin. The WEAP shall include a brief review of the special status species and other sensitive resources that could occur in the proposed project site (including their life history and habitat requirements and what portions of the proposed project area they may be found in) and their legal status and protection. The program shall also cover all mitigation measures, environmental permits and proposed project plans, such as the SWPPP, BMPs, erosion control and sediment plan, and any other required plans. During WEAP training, construction personnel shall be*	LS	LS

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			informed of the importance of avoiding ground-disturbing activities outside of the designated work area. The designated biological monitor shall be responsible for ensuring that construction personnel adhere to the guidelines and restrictions. WEAP training sessions shall be conducted as needed for new personnel brought onto the job during the construction period.		
4.4-9 Development of the proposed residential development could result in the loss of potential foraging habitat for Swainson's hawk, white-tailed kite, Cooper's hawk, and other raptors (birds of prey).	PS	PS	4.4-9 (A & B) *The project applicant shall participate in the Yolo County H/NCCP (Habitat/Natural Community Conservation Program) to satisfy the requirement to mitigate the loss of Swainson's Hawk foraging habitat. Participation in the H/NCCP shall mean payment of appropriate interim mitigation fees that are in effect prior to the issuance of a grading permit or recordation of the first final map (whichever comes first) or implementation or another project specific mitigation plan which is deemed appropriate to the CDFG. In the event that the final H/NCCP is adopted before development occurs, the applicant shall participate in the Final H/NCCP to mitigate for the loss of Swainson's Hawk foraging habitat.*	LS	LS
4.4-10 Implementation of the proposed residential development, in combination with other regional development, would convert open space to urban uses, leading to a continuing loss of habitat for native resident and migratory wildlife.	LS	LS	4.4-10 (A & B) *None required.*	NA	NA
4.4-11 Implementation of the proposed bank stabilization project, in combination with other regional development, could degrade riparian habitat along the Sacramento River, continuing the regional loss of habitat for native resident and migratory wildlife.	LS	LS	4.4-11 (A & B) *None required.*	NA	NA

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
4.5 Cultural Resources					
4.5-1 Construction of the bank stabilization component of the project could disturb or destroy prehistoric site CA-YOL-25.	S	S	4.5-1 (A & B) (a) *The project applicant shall retain a qualified archeologist, who are either certified by the Society of Professional Archaeologists (SOPA) or meet the federal standards as stated in the Code of Federal Regulations (36 C.F.R. 61,) to perform on-site monitoring during all construction activities related to the bank stabilization portion of the proposed project. If archeological resources are discovered during construction all work shall stop within a 100 foot radius. The appropriate Native American Group shall be notified of the construction dates and consulted concerning mitigation if any portion of the site is found during construction. The qualified archeologist shall complete a mitigation plan for all eligible resources, which is to be reviewed and approved by the City prior to implementation. Data recovery could be required as a part of this plan. This mitigation plan shall be implemented as specified by the plan.* (b) *The project applicant shall assure that project personnel are informed that collecting significant historical or unique archaeological resources discovered during development of the project is prohibited by law. Prehistoric or Native American resources can include chert or obsidian flakes, projectile points, mortars, and pestles as well as dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources can include nails, bottles, or other items often found in refuse deposits.* (c) *Any report prepared by a qualified archeologist pertaining to resources found at the project site shall be submitted to the Northwest Information Center and the City.*	LS	LS

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
4.5-2 Construction of the proposed residential uses, school and supporting infrastructure could disturb or destroy undiscovered archeological resources.	LS	LS	4.5-2 (A & B) *None required.*	NA	NA
4.5-3 Cumulative development including the proposed project could result in the damage or destruction of previously unidentified prehistoric resources.	S	S	4.5-3 (A & B) *Implement Mitigation Measure 4.5-1 (a) through (c).*	LS	LS
4.6 Land Use					
4.6-1 Development of the proposed project could result in land uses that are incompatible with internal existing and planned uses.	LS	LS	4.6-1 (A & B) *None required.*	NA	NA
4.6-2 Development of the proposed project could result in land uses that are incompatible with surrounding existing and planned uses.	LS	LS	4.6-2 (A & B) *None required.*	NA	NA
4.6-3 Development of the proposed project could result in a conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental impact.	LS	LS	4.6-3 (A & B) *None required.*	NA	NA
4.7 Noise					
4.7-1 Construction of the proposed project would temporarily increase noise levels at nearby sensitive noise receptors.	S	S	4.7-1 (A & B) *(a) Construction activities shall be restricted to occur between the hours of 7:00 A.M. and 6:00 P.M. All internal combustion engines shall be adequately muffled and maintained.* *In addition, the following mitigation measure is recommended for Scenario A only:* *(b) Construction of the school shall include noise attenuation techniques and materials to ensure acceptable interior noise levels.*	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
4.7-2 Proposed project would create non-transportation noise.	PS	LS	4.7-2 (A) *(a) The developer(s) of the future residential uses to the west of the proposed school site shall be required to conduct an acoustical study prior to approval of final site plans to determine exterior and interior noise levels. Appropriate noise attenuation measures shall be recommended and implemented as part of project design, as appropriate.* *Or* *(b) If the proposed school site is developed prior to the future residential uses west of the site, developers of the school shall conduct an acoustical study prior to approval of final site plans to determine exterior playground noise levels. Appropriate noise alternative measures shall be recommended and implemented as part of the school design, as appropriate.*	LS	NA
4.7-3 The proposed project would create transportation noise that could affect new and existing sensitive receptors.	S	S	4.7-3 (A & B) *None available.*	SU	SU
4.7-4 The proposed project would influence cumulative noise levels in future years.	S	LS	4.7-4 (A) *None available.*	SU	NA
4.8 Public Services					
4.8-1 Development of the project could generate the need for additional firefighters, resulting in the need to construct additional fire protection facilities in order to maintain acceptable levels of service.	PS	PS	4.8-1 (A & B) *(a) The City shall collect sufficient funding for ongoing operations, including the cost of additional fire department personnel associated with the proposed project. The funds shall be generated from property taxes collected from areas that are outside the City's Redevelopment Project Area; sales taxes generated within the City; and pass through payments from the City's Redevelopment Agency to the City's General Fund.* *(b) The Fire Facilities Development Fee shall be paid by applicant prior to issuance of building permit.*	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
4.8-2 Implementation of the proposed project, in combination with other development in the City of West Sacramento, could result in increased demands for fire protection services.	PS	PS	4.8-2 (A & B) *Implement Mitigation Measure 4.8-1.*	LS	LS
4.8-3 Development of the project could generate the need for additional sworn and non-sworn officers resulting in the need to construct additional police protection facilities in order to maintain acceptable levels of service.	PS	PS	4.8-3 (A & B) *(a) The City shall collect sufficient funding for ongoing operations, including the cost of additional police department personnel associated with the proposed project. Funding shall be generated from property taxes collected from areas that are outside the City's Redevelopment Project Area; sales taxes generated within the City; and pass through payments from the City's Redevelopment Agency to the City's General Fund.* *(b) Facility funding shall be generated through payment of the Police Facilities Development Fee. This fee shall be paid prior to issuance of building permits.*	LS	LS
4.8-4 Implementation of the proposed project, in combination with other development in the City of West Sacramento, could result in increased demands for police services.	PS	PS	4.8-4 (A & B) *Implement Mitigation Measure 4.8-3.*	LS	LS
4.8-5 Development of the project could result in increased production of solid waste in excess of available landfill capacity.	LS	LS	4.8-5 (A & B) *None required.*	NA	NA
4.8-6 Implementation of the proposed project, in combination with other development in the City of West Sacramento, would result in increased population could result in increased generation of solid waste in excess of available landfill capacity.	LS	LS	4.8-6 (A & B) *None required.*	NA	NA

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
4.8-7 Development of the project could generate students exceeding the capacity of existing schools, resulting in the need to construct additional school facilities.	PS	PS	4.8-7 (A & B) *Prior to initiation of property acquisition or development of any school facilities, WUSD shall prepare an Environmental Site Assessment consistent with the requirements and contents specified by California Education Code.*	LS	LS
4.8-8 Development of the project could generate students exceeding the capacity of existing schools.	LS	S	4.8-8 (A & B) *Prior to issuance of building permits, the developer shall pay the necessary school impact fees for the standard capital improvements fund as mandated by State law and established by the Washington Unified School District.*	NA	LS
4.8-9 Implementation of the proposed project, in combination with other development in the City of West Sacramento, would result in increased numbers of students.	S	S	4.8-9 (A & B) *Implement Mitigation Measure 4.8-8.*	LS	LS
4.8-10 Proposed Project would create additional demand necessitating the construction or expansion of existing recreational facilities, which could have an adverse physical effect on the environment.	PS	PS	4.8-10 (A & B) *Prior to issuance of any building permit, the project developer shall pay in lieu fees or provide a combination of land dedication and fees in order to maintain the City's defined parkland standards.*	LS	LS
4.8-11 Proposed project could increase use of existing park facilities such that substantial physical deterioration of the facility could occur or be accelerated.	LS	LS	4.8-11 (A & B) *None required.*	NA	NA
4.8-12 Implementation of the proposed project, in combination with other development in the City of West Sacramento, would result in increased population and demands for parkland.	PS	PS	4.8-12 (A & B) *Implement Mitigation Measure 4.8-10.*	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
4.9 Public Utilities					
4.9-1 The proposed project could increase flow to regional wastewater treatment plants beyond the plants treatment capacity necessitating the expansion of existing or construction of additional wastewater treatment facilities.	PS	PS	4.9-1 (A&B) *Wastewater from the initial phases of the project may shall be accommodated at the existing wastewater treatment plant until such time as the total treatment requirements reach 90 percent of capacity. Thereafter, development shall not occur until the construction and connection to the Sacramento Regional County Sanitation District (SRCSD) interceptor is completed.*	LS	LS
4.9-2 Development of the proposed project could generate wastewater that could exceed the capacity of the existing infrastructure system.	PS	PS	4.9-2 (A&B) (a) *Prior to tentative map approval, the developer shall submit engineering calculations and wastewater conveyance system design specifications to the City Engineer for review and approval.* (b) *Implementation of Mitigation Measure 4.9-1.*	LS	LS
4.9-3 Implementation of the proposed project, in combination with other development in the City of West Sacramento, could result in increased quantities of wastewater that would exceed existing regional collection, treatment and disposal capabilities.	PS	PS	4.9-3 (A&B) *Implementation of Mitigation Measure 4.9-1.*	LS	LS
4.9-4 Development of the project would increase the demand for electricity and could result in the need for additional supply and/or distribution infrastructure.	LS	LS	4.9-4 (A&B) *None required.*	NA	NA
4.9-5 Development of the proposed project would increase the demand for natural gas, and could result in the need for additional distribution infrastructure.	LS	LS	4.9-5 (A&B) *None required.*	NA	NA

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	Scenario A	Scenario B		Scenario A	Scenario B
4.9-6 Implementation of the proposed project, in combination with other development in the City of West Sacramento, would result in an increased demand for electrical and natural gas supplies and distribution infrastructure.	LS	LS	4.9-6 (A&B) *None required.*	NA	NA
4.9-7 The proposed project would result in increased storm water runoff that could exceed the capacity of the existing drainage infrastructure.	S	S	4.9-7 (A & B) *The project applicant shall hire a State registered engineer to model 100-year storm event flows and design the stormwater drainage infrastructure to convey the flows from the 100-year storm event prior to improvement plan approval.*	LS	LS
4.9-8 The proposed project, in combination with buildout of The Rivers development area served by the RD 811, would result an increase in stormwater runoff that could exceed the capacity of existing drainage infrastructure.	S	S	4.9-8 (A & B) *Implement Mitigation Measure 4.9-7.*	LS	LS
4.10 Transportation and Circulation					
4.10-1 Under Existing Plus Project conditions, the Douglas Street/Sacramento Avenue intersection would continue to operate at an unacceptable LOS E during the PM peak hour.	LS	LS	4.10-1 (A & B) *None required.*	NA	NA
4.10-2 Under Existing Plus Project conditions, the proposed project could adversely affect existing or planned features or programs that support alternative transportation.	S	S	4.10-2 (A & B) *The applicant shall be required to provide public transit facilities including bus turnouts, bus shelters and adequate lighting as required by the City's Engineering Division and the Yolo County Transit Authority. Construction of these facilities shall be phased consistent with the phased development of the project.*	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
4.10-3 Under Existing Plus Project conditions, the proposed project could adversely affect existing bikeway or pedestrian facilities and/or aspects of the City's Bicycle and Pedestrian Path Master Plan.	LS	LS	4.10-3 (A & B) *None required.*	NA	NA
4.10-4 Under existing plus project conditions, the proposed project could result in inadequate parking capacity.	S	S	4.10-4 (A & B) (a) *All on-street and off-street parking shall be designed consistent with PD-29, including adopted amendments, the Zoning Ordinance, and the City's Standard Specifications.* Scenario A only: (b) *The school shall be designed to provide sufficient parking consistent with Department of Education Guidelines and shall accommodate all parking on-site.*	LS	LS
4.10-5 Under Cumulative Plus Project conditions, the Kegle Drive/Lighthouse Drive/Pierce Street intersection would operate at an unacceptable LOS F during the AM peak hour under Scenario A.	S	LS	4.10-5 (A) *The applicant shall make a fair share contribution to funding the installation of a traffic signal at the intersection of Kegle Drive/Lighthouse Drive/Pierce Street*.	LS	NA
4.10-6 Under Cumulative Plus Project conditions, the Kegle Drive/Jefferson Boulevard/Sacramento Avenue intersection would operate at an unacceptable LOS F during both the AM and PM peak hours, and the V/C ratio would increase by more than .05 during the AM peak hour.	S	S	4.10-6 (A&B) *The applicant shall make a fair share contribution to funding the addition of a southbound right-turn lane at the intersection of Kegle Drive/Jefferson Boulevard/Sacramento Avenue*.	LS	LS
4.10-7 Under Cumulative Plus Project conditions, the Douglas Street/Sacramento Avenue intersection would operate at an unacceptable LOS F during both the AM and PM peak hours.	S	S	4.10-7 (A&B) *The applicant shall make a fair share contribution to funding the installation of a traffic signal at the intersection of Douglas Street/Sacramento Avenue and an eastbound left-turn lane.*	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
4.10-8 Under Cumulative Plus Project conditions, cumulative development could adversely affect existing or planned features or programs that support alternative transportation.	S	S	4.10-8 (A & B) *Implement Mitigation Measure 4.10-2.*	LS	LS
4.11 Water Supply					
4.11-1 The proposed project's demand for water could exceed available sources of water supply sources.	LS	LS	4.11-1 (A & B) *None required.*	NA	NA
4.11-2 The proposed project's demand for water could exceed the availability of treated water, citywide water storage and distribution facilities resulting in the need for new or expanded facilities.	S	S	4.11-2 (A & B) *In accordance with the 2005 Water Master Plan Update, the master planned water storage shall be constructed by the developer and functional prior to first occupancy within the project site.*	LS	LS
4.11-3 The proposed project, in combination with buildout of project's in the City of West Sacramento, would increase water demand throughout the City that could exceed water supplies.	LS	LS	4.11-3 (A & B) *None required.*	NA	NA
4.11-4 The proposed project, in combination with buildout of project's in the City of West Sacramento, would contribute to increased water demands throughout the City that could exceed BBWTP treatment capabilities, stifle the pumping facilities or deplete firm storage capacities within the City's service area.	S	S	4.11-4 (A & B) *Based on the analysis and recommendations in the 2005 Water Master Plan Update, the City should proceed with project PO7 and the recommended rate increases on the proposed timeline.*	LS	LS
Initial Study					
I. AESTHETICS **Would the project:** **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**	LS	LS	*None required.*	NA	NA

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	Scenario A	Scenario B		Scenario A	Scenario B
III. AIR QUALITY **Would the project:** **Create objectionable odors affecting a substantial number of people?**	LS	LS	*None required.*	NA	NA
IV. BIOLOGICAL RESOURCES **Would the project:** **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**	PS	PS	Mitigation Measure 1 *The project applicant shall submit a tree plan containing the following information:* a. *Contour map showing the location, size, species, and condition of all existing trees which are located on the property proposed for development;* b. *Identification of those trees which the applicant proposes to preserve and those heritage, landmark, and street trees which are proposed to be removed and the reason for such removal;* c. *A description of measures to be followed to ensure survival of heritage, landmark, and street trees during construction;* d. *A program for the preservation of heritage, landmark, and street trees during and after completion of the project which shall include the following:* 1. *Each tree or group of trees to be preserved shall be enclosed with a fence prior to any grading, movement of heavy equipment, approval of improvement plans or the issuance of any permits and such fence shall be removed following construction but prior to installation of landscaping material;* 2. *Fencing shall be located one foot outside of dripline of the tree or trees and shall be a minimum of six feet in height;*	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
			3. *Signs shall be posted on all sides of fences surrounding each tree stating that each tree is to be preserved;* 4. *Any and all exposed roots shall be covered with a protective material during construction.* *e. A program for the replacement of any trees proposed to be removed. Said program shall be in conformance with Section 8.24.084 of the Municipal Code.* *Tree permits must be completed for all species 75 inches circumference and over and all oaks 50 inches circumference and over prior to any grading (within 1 foot outside the dripline), trimming, or removal.*		
V. CULTURAL RESOURCES **Would the project:** **Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**	PS	PS	Mitigation Measure 2 *The project applicant shall incorporate the following language into construction documents:* • *Should any evidence of either surface or subsurface historic resources be encountered during grading or excavation, work shall be suspended within 100 feet of the find, and the City of West Sacramento shall be immediately notified. At that time, the City shall coordinate any necessary investigation of the site with a qualified historical architect to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery and relocation. The contractor shall implement any measures deemed necessary by the City of West Sacramento for the protection of the historic resource.*	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	PS	PS	Mitigation Measure 3 *The project applicant shall require incorporate the following language into construction documents:* • *Should any evidence of paleontological resources (e.g., fossils) be encountered during grading or excavation, work shall be suspended within 100 feet of the find, and the City of West Sacramento shall be immediately notified. At that time, the City shall coordinate any necessary investigation of the site with a qualified paleontologist to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations. The contractor shall implement any measures deemed necessary by the paleontologist for the protection of the paleontological resources.*	LS	LS
Disturb any human remains, including those interred outside of formal cemeteries?	PS	PS	Mitigation Measure 4 *The project applicant shall incorporate the following language into construction documents:* • *In the event of discovery or recognition of any human remains on the project site, the project sponsor shall contact the Yolo County Coroner, pursuant to Section 7050.5(b) of the California Health and Safety Code. In this event, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until (1) the Coroner determines that the remains are not subject to the provisions of Section 27491 of the Government Code or any*	LS	LS

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			other related provisions of law concerning investigation of the circumstances, manner and cause of death, and (2) the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. No further disturbance of the site may be made except as authorized by the County Coroner. The Coroner shall make the determination within two working days from the time the person responsible for the excavation, or authorized representative, notifies the Coroner of the discovery or recognition of the human remains. • *If the remains are Native American, the Coroner shall notify the Native American Heritage Commission, which in turn shall inform a most likely descendent. The descent will then recommend to the landowner appropriate disposition of the remains and any grave goods. Disposition may include (1) in-situ reinternment of the remains and associated artifacts and capping the site or (2) relocation and reinternment.*		

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
IV. GEOLOGY AND SOILS **Would the project:** **Expose people or structures to potential substantial adverse effects including the risk of loss injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**	PS	PS	Mitigation Measure 5 *The project applicant shall incorporate the recommendations contained in the April 22, 2004 Geotechnical Engineering Report, The Rivers Phase 2-Portions of Lots 53, 54 and 55 prepared by Wallace-Kuhl & Associates, Inc. into site preparation techniques, and building and infrastructure design and construction.*	LS	LS
Expose people or structures to potential substantial adverse effects including the risk of loss injury, or death involving strong seismic ground shaking?	PS	PS	*Implement Mitigation Measure 5.*	LS	LS
Expose people or structures to potential substantial adverse effects including the risk of loss injury, or death involving seismic-related ground failure, including liquefaction?	PS	PS	*Implement Mitigation Measure 5.*	LS	LS
Result in substantial soil erosion or the loss of topsoil?	PS	PS	Mitigation Measure 6 *The applicant shall prepare a grading, geotechnical and erosion control plan. The plan shall be submitted to the City of West Sacramento Engineering Division for approval prior to approval of the improvement plans.*	LS	LS
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?	PS	PS	*Implement Mitigation Measure 5.*	LS	LS

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
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?	PS	PS	*Implement Mitigation Measure 5.*	LS	LS
VII. HAZARDS AND HAZARDOUS MATERIALS **Would the project:** **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**	LS	LS	*None required.*	NA	NA
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?	PS	PS	Mitigation Measure 7 (a) *Prior to any activity involving site preparation and/or demolition of golf course structures, the results of a follow-up investigation to the previous Phase I ESAs for the project site shall be prepared by a qualified professional to identify whether there are any "recognized environmental conditions," as defined by the ASTM Phase I ESA standard, requiring mitigation. The evaluation shall include identification of ACBM, lead-based paint, and other structural or non-structural items that could include or be contaminated with hazardous substances. The evaluation shall also include a qualitative determination of whether past pesticide and herbicide use at the golf course could have resulted in levels of contaminants in soil or groundwater that would present a human health risk to construction workers and future single-family residential development.* (b) *If the Phase I ESA recommends a Phase II evaluation, the Phase II evaluation shall be completed prior to site preparation. No site work or demolition shall occur until all hazards are identified and managed to the satisfaction of the*	LS	LS

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			(c) *Yolo County Environmental Health Department, City of West Sacramento, and Yolo-Solano Air Quality Management District (for asbestos abatement).* (d) *In the event that previously unidentified USTs or other features or materials that could present a threat to human health or the environment are discovered during excavation and grading, construction in that immediate area shall cease immediately. A qualified professional shall evaluate the location and hazards and make appropriate recommendations. Work shall not proceed in that area until identified hazards are managed to the satisfaction of YCEHD.*		
Emit hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	LS	LS	*None required.*	NA	NA
VIII. HYRDROLOGY AND WATER QUALITY **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)?**	LS	LS	*None required.*	NA	NA

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
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 that would result in substantial erosion or siltation on- or off-site?	PS	PS	Mitigation Measure 8 *The applicant shall prepare a comprehensive plan demonstrating how erosion, siltation and contamination of stormwater shall be prevented. The plan shall be submitted to the City of West Sacramento Engineering Division for approval prior to approval of the final map. The plan shall be prepared in accordance with the conditions and requirements of the NPDES General Construction Activity Stormwater Permit.* Mitigation Measure 9 *The applicant shall prepare a comprehensive plan demonstrating how post-construction stormwater quality measures shall be designed and implemented to protect receiving water quality. The plan shall be submitted to the City of West Sacramento Engineering Division for approval prior to approval of improvement plans.*	LS	LS
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?	PS	PS	*Implement Mitigation Measure 8 and 9.*	LS	LS
Otherwise substantially degrade water quality?	PS	PS	*Implement Mitigation Measure 8 and 9.*	LS	LS
Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	LS	LS	*None required.*	NA	NA
Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	LS	LS	*None required.*	NA	NA
Inundation by seiche, tsunami, or mudflow?	LS	LS	*None required.*	NA	NA

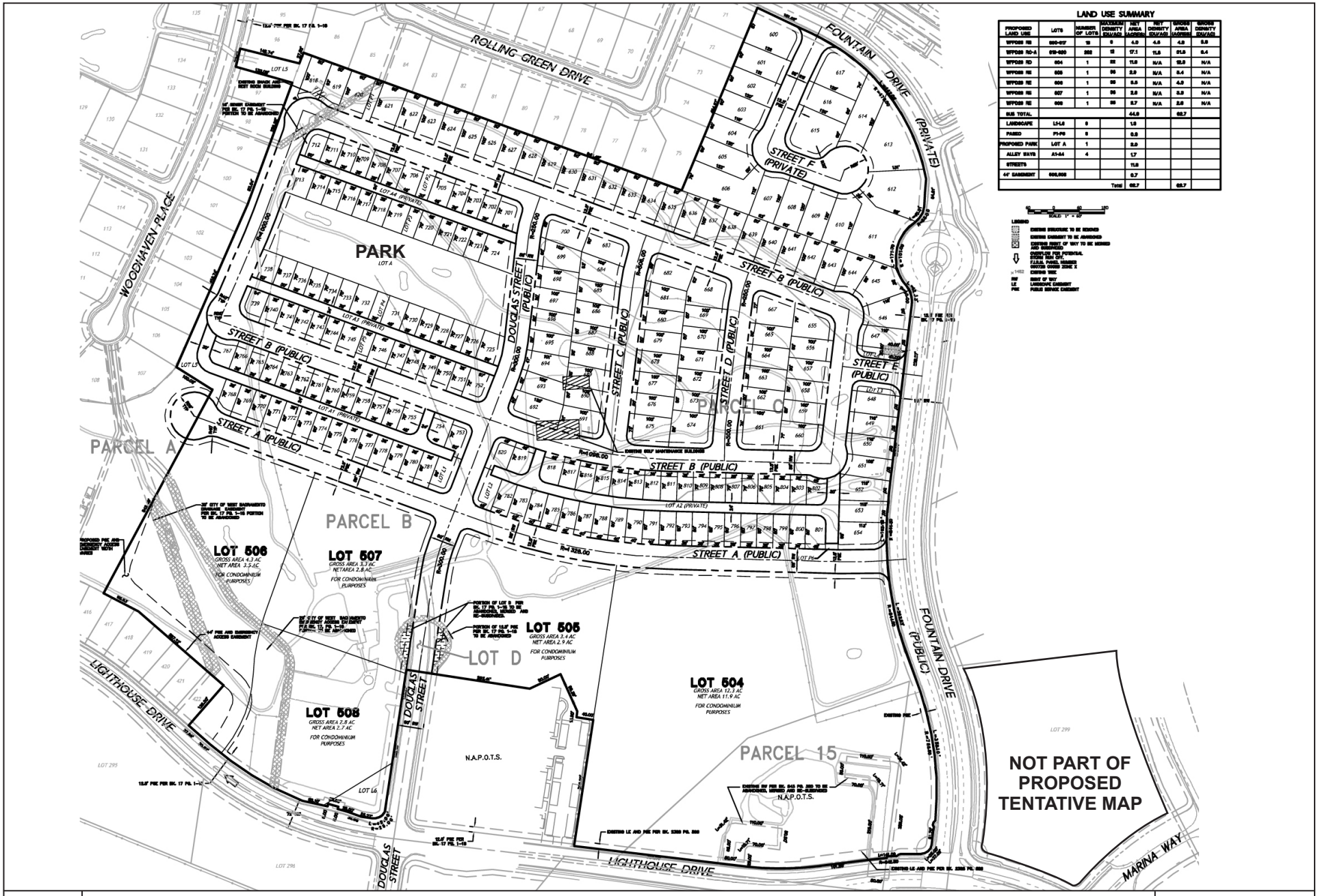
LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
X. MINERAL RESOURCES	LS	LS	*None required.*	NA	NA
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?					
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?	LS	LS	*None required.*	NA	NA
XI. NOISE	PS	PS	Mitigation Measure 10 *The project proponent shall incorporate the following language into construction documents:* • *All construction activities shall take place between the hours of 7 a.m. and 6 p.m.* • *Prior to any demolition and construction activity associated with the proposed project, all habited structures located within a radius of 100 feet of the construction sites shall be notified of the planned schedule of construction activities that could generate substantial groundborne vibration.*	LS	LS
Would the project:					
Exposure of persons to or generation of excessive groundborne vibration noise levels?					
XV. TRANSPORTATION/TRAFFIC	LS	LS	*None required.*	NA	NA
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)?					
Result in inadequate emergency access.	LS	LS	*None required.*	NA	NA

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable



PROPOSED LAND USE	LOTS	NUMBER OF LOTS	MAXIMUM DENSITY DU/AC	NET AREA ACRES	NET DENSITY DU/AC	GROSS AREA ACRES	GROSS DENSITY DU/AC
WPCSP-RS	600-617	18	6	4.0	4.5	4.8	5.8
WPCSP-RD-A	618-620	262	12	17.1	11.5	21.5	8.4
WPCSP-RD	804	1	22	11.8	N/A	12.5	N/A
WPCSP-RE	805	1	20	2.9	N/A	3.4	N/A
WPCSP-RE	806	1	20	3.5	N/A	4.0	N/A
WPCSP-RE	807	1	20	2.8	N/A	3.3	N/A
WPCSP-RE	808	1	20	2.7	N/A	2.9	N/A
SUB TOTAL				44.8		52.7	
LANDSCAPE	L1-L8	8		1.8			
PASEO	P1-P8	8		3.8			
PROPOSED PARK	LOT A	1		2.0			
ALLEY WAYS	A1-A4	4		1.7			
STREETS				11.8			
44' EASEMENT	600,805			5.7			
			TWM	69.7		69.7	

FIGURE **3-3**

Vesting Tentative Subdivision Map

***Source*:** NOLTE, 2005

City of West Sacramento

EIP ASSOCIATES

11006-00

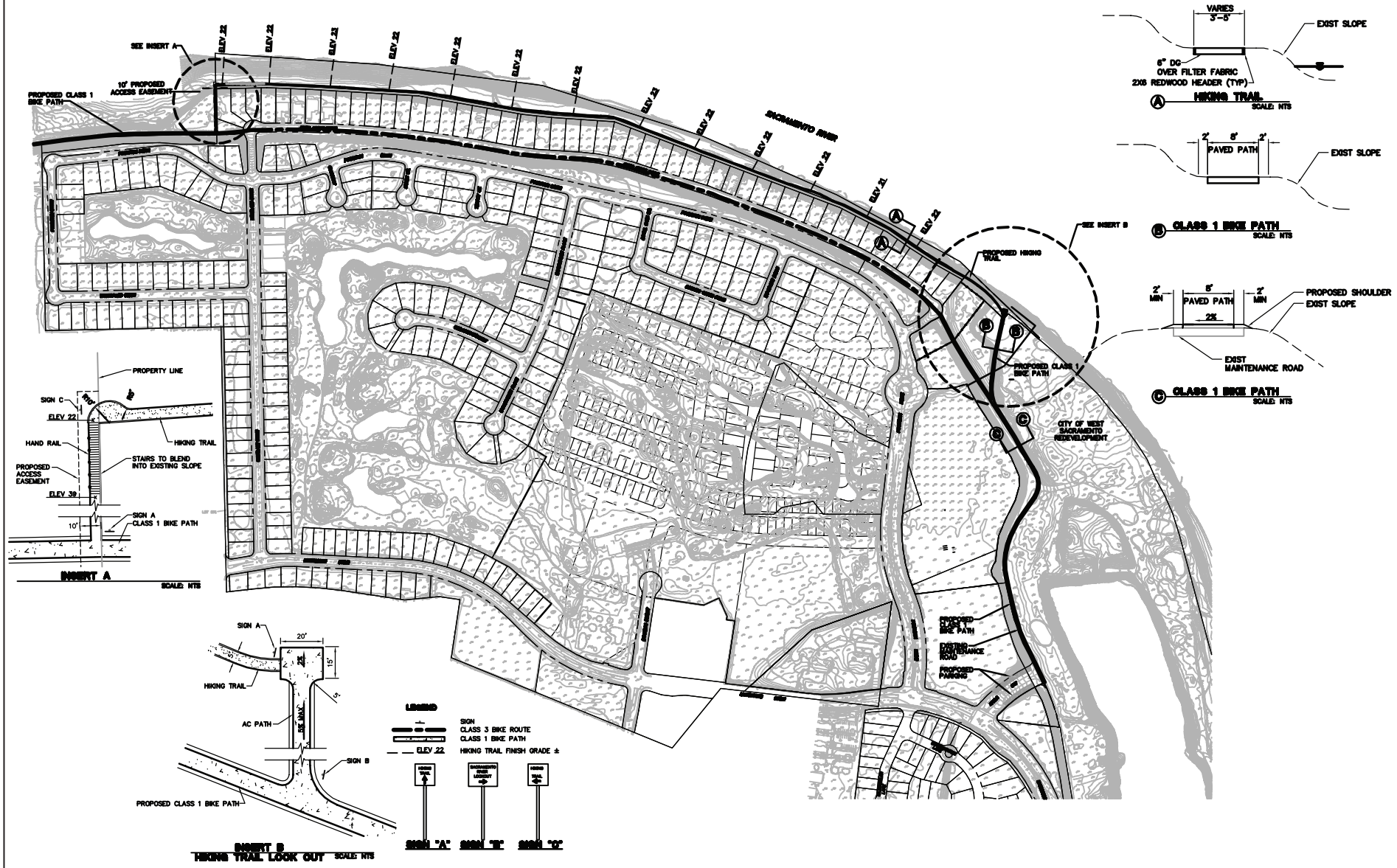


FIGURE **3-8A**

Hiking Trail Conceptual Plan

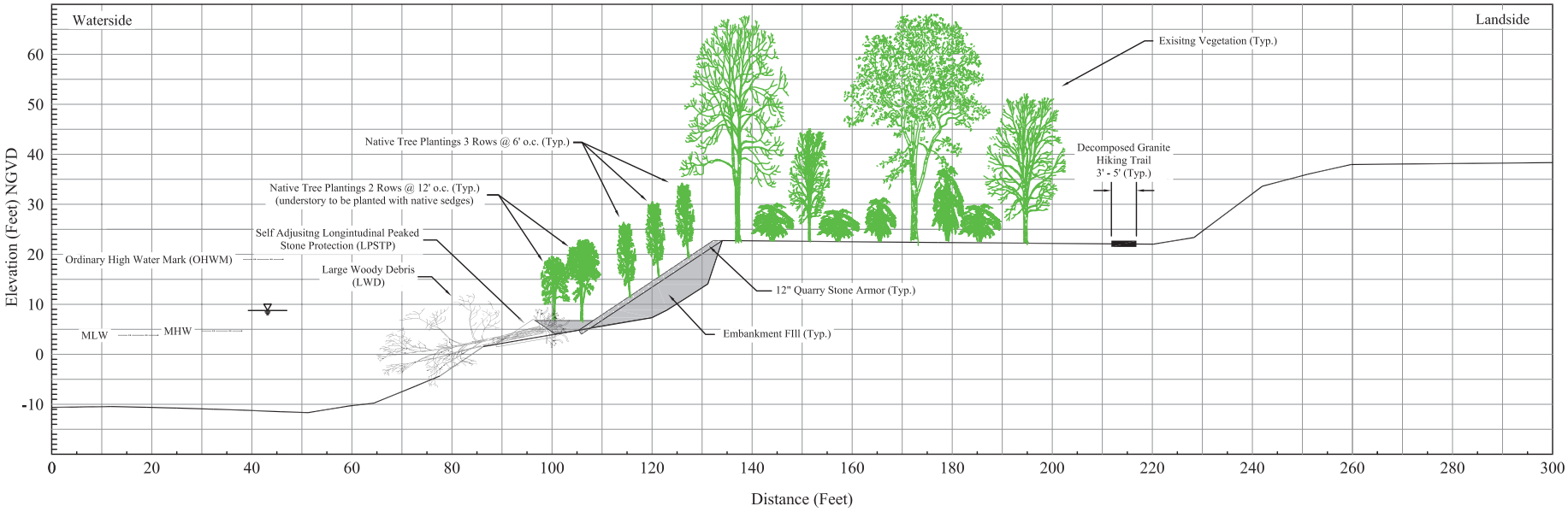
Source: NOLTE, 2006

City of West Sacramento

11006-00

200 0 200 400
SCALE: 1" = 200'

EIP ASSOCIATES



Planting Quantity Estimate

Trees (Willow, Alder, Cottonwood)	2,000
Herbaceous (Sedge, Rush)	6,000

11006-00

FIGURE **3-8B**

MBK Levee Typical Cross Section

***Source*:** MBK Engineers, 2006

City of West Sacramento

EIP ASSOCIATES

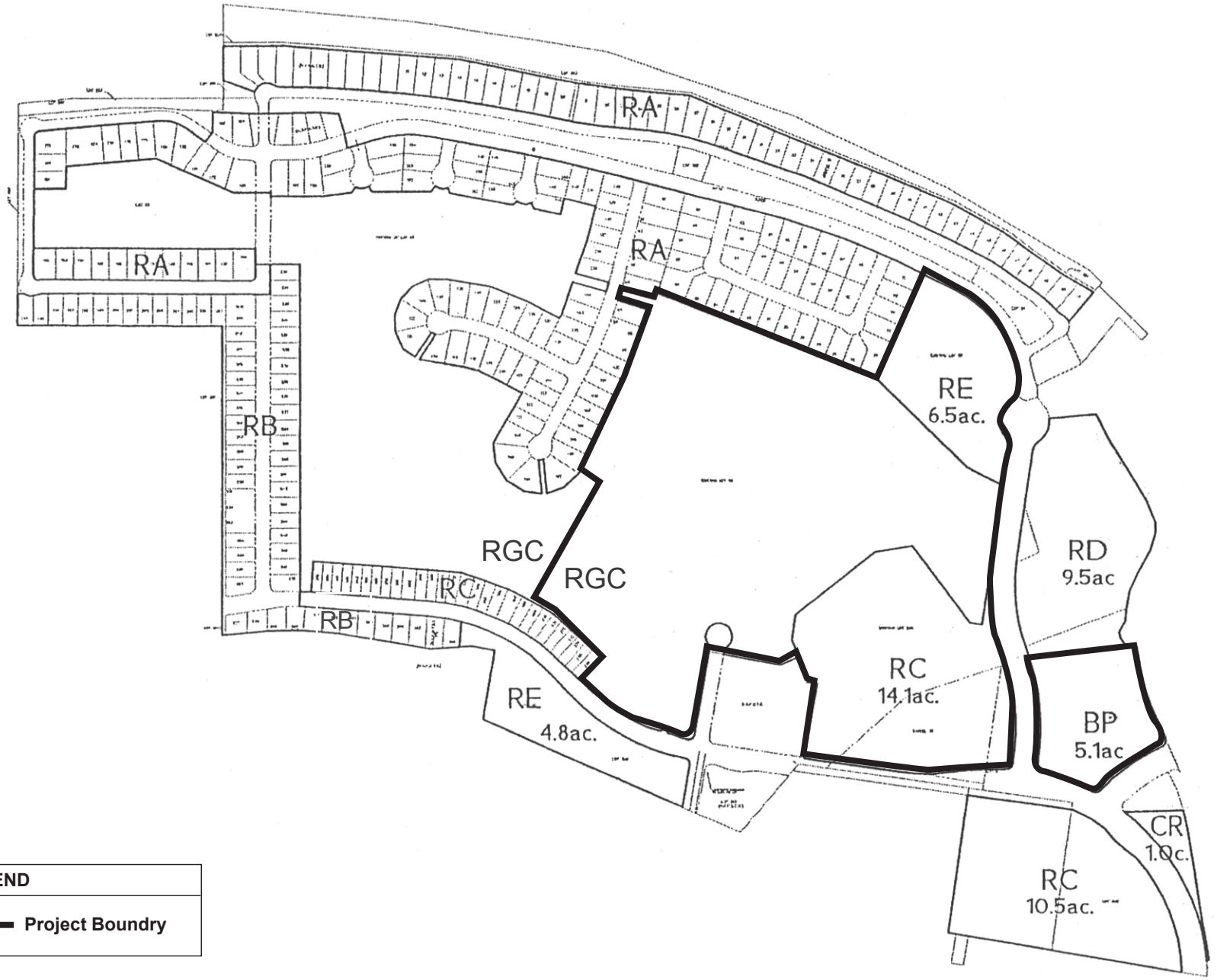


FIGURE **4.6-1**

Existing PD-29 Designations

***Source*:** NOLTE Engineering

Not to Scale

11006-00

EIP ASSOCIATES

3. LIST OF AGENCIES AND PERSONS COMMENTING

3. LIST OF AGENCIES AND PERSONS COMMENTING

3.1 STATE AGENCIES

1. Governor's Office of Planning and Research State Clearinghouse and Planning Unit, Terry Roberts, January 5, 2006 and January 17, 2006.
2. Department of Water Resources, Mike Mirmazaheri, Chief, Floodway Protection Section, December 5, 2006.
3. California Department of Transportation, District 3 – Sacramento Office, Katherine Eastham, Chief, Office of Transportation Planning – Southwest and East, January 3, 2006.
4. California State Lands Commission, Dwight E. Sanders, Chief, Division of Environmental Planning and Management, January 9, 2006.

3.2 LOCAL AGENCIES

5. City of West Sacramento Parks and Recreation, Dena Kirtley, Tree Program Coordinator, December 2, 2005.
6. Washington Unified School District, Denny Jones, Director, Facilities Planning and Construction, December 22, 2005.

3.3 INDIVIDUALS AND ORGANIZATIONS

7. Alberto Esquivel, Project Manager, West Riverview LLC, January 4, 2006.

4. COMMENTS AND RESPONSES

LETTER 1

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

RECEIVED
JAN 10 2006

Arnold Schwarzenegger
Governor

Sean Walsh
Director

January 5, 2006

RECEIVED
JAN 06 2006
DEPARTMENT OF COMMUNITY DEVELOPMENT

Sandra White
City of West Sacramento
1110 W. Capitol Avenue, 2nd Floor
West Sacramento, CA 95691

Subject: Rivers Phase II
SCH#: 2005042018

Dear Sandra White:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on January 4, 2006, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. 1-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2005042018
Project Title Rivers Phase II
Lead Agency West Sacramento, City of

Type EIR Draft EIR

Description The Rivers Phase II project includes development of approximately 626 single-family homes, an approximately 12.3-acre K-8 school site, a two-acre park, and supporting infrastructure on approximately 68 acres of the approved Lighthouse Marina and Riverbend Development Project area in the City of West Sacramento. If the Washington Unified School District (WUSD) determines that it does not want to construct and operate the proposed school, then the project would construct an additional 176 residential units on the 12.3-acre site for a total of 802 units. The proposed project also includes installation of approximately 3,000 lineal feet of bank stabilization along the Sacramento River. Finally, the proposed project includes text amendments to PD-29, approval of a large lot tentative subdivision map, and approval of a Water Supply Assessment.

Lead Agency Contact

Name Sandra White
Agency City of West Sacramento
Phone (916) 617-4645 **Fax**
email
Address 1110 W. Capitol Avenue, 2nd Floor
City West Sacramento **State** CA **Zip** 95691

Project Location

County Yolo
City West Sacramento
Region
Cross Streets East Fountain Drive and Lighthouse Drive
Parcel No. Several
Township **Range** **Section** **Base**

Proximity to:

Highways 80 & 99
Airports
Railways Union Pacific
Waterways Sacramento River
Schools Elkhorn Village,Bryte, Aiyce Norman, & Holy Cross Elem. Schools
Land Use Currently developed with a combination of vacant land and a former golf course. Cur... Waterfront PD-29 with a General Plan designation of Riverfront Mixed Use.

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

Reviewing Agencies Resources Agency; Regional Water Quality Control Bd., Region 5 (Fresno); Department of Parks and Recreation; Native American Heritage Commission; Department of Health Services; Reclamation Board; Office of Historic Preservation; Department of Fish and Game, Region 2; California Highway Patrol; Caltrans, District 3; Department of Toxic Substances Control; State Water Resources Control Board, Clean Water Program; State Lands Commission; Caltrans, Division of Aeronautics

Date Received 11/21/2005 **Start of Review** 11/21/2005 **End of Review** 01/04/2006

Note: Blanks in data fields result from insufficient information provided by lead agency.

STATE OF CALIFORNIA

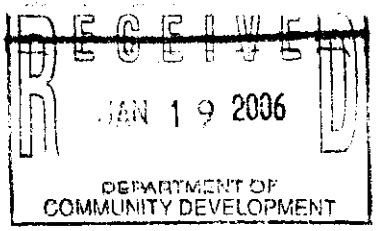
Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Sean Walsh
Director

January 17, 2006



Sandra White
City of West Sacramento
1110 W. Capitol Avenue, 2nd Floor
West Sacramento, CA 95691

Subject: Rivers Phase II
SCH#: 2005042018

Dear Sandra White:

The enclosed comment (s) on your Draft EIR was (were) received by the State Clearinghouse after the end of the state review period, which closed on January 4, 2006. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project. 1-2

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2005042018) when contacting this office.

Sincerely,

Terry Roberts

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures
cc: Resources Agency

CALIFORNIA STATE LANDS COMMISSION

CRUZ M. BUSTAMANTE, *Lieutenant Governor*
STEVE WESTLY, *Controller*
MICHAEL C. GENEST, *Director of Finance*

EXECUTIVE OFFICE
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 *Fax* **(916) 574-1810**
California Relay Service TDD Phone 1-800-735-2929
Voice Phone 1-800-735-2922

January 9, 2006

File Ref: W 30106
SCH: 2005042018

RECEIVED
JAN 17 2006
STATE CLEARING HOUSE

Clear
1-4-06
Late

Ms. Nadell Gayou
The Resources Agency
901 P Street
Sacramento, CA 95814

Ms. Sandra White
Senior Planner
1110 West Capitol Avenue
West Sacramento, CA 95691

Dear Ms. White:

Staff of the California State Lands Commission (CSLC) has reviewed the city of West Sacramento's (City) Draft Environmental Impact Report (DEIR) for the Rivers Phase II Project (Project). The CSLC is a Responsible Agency for that portion of the Project that "includes installation of approximately 3,000 lineal feet of bank stabilization along the Sacramento River," and staff provides the following comments for your consideration.

Jurisdiction

The State acquired sovereign ownership of all tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all the people of the State for statewide Public Trust purposes which include waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. The landward boundaries of the State's sovereign interests in areas that are subject to tidal action are generally based upon the ordinary high water marks of these waterways as they last naturally existed. In non-tidal navigable waterways, the State holds a fee ownership in the bed of the waterway between the two ordinary low water marks as they last naturally existed. The entire non-tidal navigable waterway between the ordinary high water marks is subject to the Public Trust. The State's sovereign interests are under the jurisdiction of the State Lands Commission.

Comments

1. The DEIR does not analyze the project described in a 1991 Boundary Line Agreement (BLA), AD 112, described on page 2 of the CSLC's response to the Notice of Preparation to which the sponsor of the proposed project is bound by the terms of said Agreement. The consequence is that the CSLC does not have the ability to compare the two projects within the context of current information and analyses to determine which, on balance, will best achieve the goals and objectives of the 1991 BLA. At minimum, the original project, as described in the Lighthouse Marina and Riverbend Development Bank Protection and Greenway EIR-1996" (Lighthouse), should have been included in the DEIR as an alternative to the proposed Project.

2. The document does not correctly reflect that the lease, PRC 7967.1, for the project analyzed in the 1996 EIR, is still in effect. The document states, in part, on page 1-2, "...all previous permits relating to the bank stabilization have since expired." Were the CSLC to substitute the proposed project for that already authorized, the existing BLA and lease would need to be amended, contrary to the information provided under "State Lands Commission Lease" at page 3-21 of the DEIR.

3. The DEIR contains no analyses of potential significant impacts to hydrology (flood control) or water quality as requested by the CSLC's response to the NOP. The need for such analyses was prematurely dismissed in the NOP at page 37 on the premise that the results of the analyses of the "larger bank stabilization project", i.e., Lighthouse "....indicated that floodway encroachment would not have a significant effect on channel capacity and flood levels during both normal downstream flow and flow reversal during the largest floods.", and since the overall footprint of the proposed project would not differ from that previously evaluated that "...because the proposed project would not place new structures that would impede or redirect flood flows, impacts would be ***less than significant*** and this issue will not be evaluated in the EIR." Since 1996, much additional work and hydrologic analyses have been conducted as part of the development of the "Sacramento Riverfront Master Plan" and under the auspices of the "Sacramento River Corridor Planning Forum". The proposed bank stabilization component of the proposed project should have been evaluated with respect to its potential hydrologic impacts on flood flows using the most recent analyses, data and information pertaining to the affected area of the Sacramento River.

Furthermore, the Lighthouse EIR, specifically in Chapter 4, Flood Control and Water Quality, reveals that the relevant project could result in potential impacts related to bank erosion, particularly to areas of river bank below the area of protected bank, and water quality, the latter specifically due to the construction of the proposed bank protection, and provides mitigation to reduce such impacts to a level below the significance criteria. The currently proposed project was not analyzed in the context of either of these impact areas and thus neither identifies nor mitigates impacts of the previous project to which this proposed project has been, with respect to its impacts on flood flows, favorably compared.

Lastly, the Lighthouse EIR, at page 4-23, discusses "Storm Drain Outfall Improvements" both in terms of then existing and potential adverse impacts of existing and proposed additional outfall structures associated with the anticipated upland development on the proposed greenway and bank stabilization. The CSLC's response to the NOP, at page 3, raises several questions with respect to this issue, but such issues are not addressed in the Rivers Phase II DEIR. Impacts associated with this issue are potentially compounded by the fact that the bank stabilization is scheduled to be built prior to the development of the upland development and thus potentially before the installation of the upland storm drain system and related, but yet to be defined, outfalls.

4. The analysis of Air Quality includes, with respect to the construction of the bank stabilization, the emissions associated with the diesel-fueled crane, but does not include the emissions of the trucks that will be used to bring clean rock rip rap from Ione or the emissions from the activities that would be necessary to get the rock to a barge from the quarry in San Rafael and thence by barge to the project site. The emissions from the truck trips to the Ione quarry and back to the project site, and the emissions generated to bring the rock from San Rafael to the project site can be listed separately, since the source of the rock has not been determined, but must be included in the emissions tally for the proposed project.

5. Transportation and Circulation are analyzed solely within the bounds of the upland development. Depending on the source of the quarry rock for the proposed project, additional trucks will be added to existing transportation corridors. The number of trucks required to bring rock to the project site should be specified and the potential impacts of such additional traffic on existing roadways, e.g., LOS, should be determined.

6. The DEIR, at page 3-15, indicates that, "A three to five foot informal hiking trail of decomposed granite or similar material could be included." The Public

Services section of the DEIR does not address the potential law enforcement issues that may be associated with such a trail or the access necessary to provide ingress and egress.

Thank you for the opportunity to provide comments on the DEIR for the Rivers Phase II project. We appreciate the extension of the comment period provided by the City on our behalf. Please contact me at sanderd@slc.ca.gov or by telephone at (916) 574-1880 if you have any questions or desire clarification or elaboration of our comments.

Sincerely,

Dwight E. Sanders, Chief
Division of Environmental
Planning and Management

Cc: Paul D. Thayer, Executive Officer
Jim Frey, Senior Staff Counsel
Diane Jones, Division of Land Management
John Briscoe, Briscoe Ivester & Bazel LLP
Alberto Esquivel, Grupe Company
Scott Morgan, OPR

COMMENT LETTER 1: Governor's Office of Planning and Research

Response to Comment 1-1

The State Clearinghouse acknowledges that the City has complied with review requirements for the Rivers Phase II Draft EIR pursuant to CEQA.

Response to Comment 1-2

See responses to Letter 4.

STATE OF CALIFORNIA -- THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 942360001
(916) 653-5791

DEC 0 5 2005

DEC 0 6 2005

Sandra White, Senior Planner
City of West Sacramento
1110 West Capitol Avenue
West Sacramento, California 95691

Rivers Phase II
State Clearinghouse (SCH) Number: 2001042018

Staff for The Department of Water Resources has reviewed the subject document and provides the following comments:

Portions of the proposed project may be located within a regulated stream over which The Reclamation Board has jurisdiction and exercises authority. If the project includes any "channel reconfiguration" that was not previously permitted, new plans must be submitted. Section 8710 of the California Water Code requires that a Board permit must be obtained prior to start of any work, including excavation and construction activities, within floodways, levees, and 10 feet landward of the landside levee toes. A list of streams regulated by the Board is contained in the California Code of Regulations, Title 23, Section 112.

Section 8(b)(2) of the Regulations states that applications for permits submitted to the Board must include a completed environmental questionnaire that accompanies the application and a copy of any environmental documents if they are prepared for the project. For any foreseeable significant environmental impacts, mitigation for such impacts shall be proposed. Applications are reviewed for compliance with the California Environmental Quality Act. 2-1

Section 8(b)(4) of the Regulations states that additional information, such as geotechnical exploration, soil testing, hydraulic or sediment transport studies, biological surveys, environmental surveys and other analyses may be required at any time prior to Board action on the application.

You may disregard this notice if your project is outside of the Board jurisdiction. For further information, please contact Sam Brandon of my staff at (916) 574-0651.

Sincerely,

Mike Mirmazaheri, Chief
Floodway Protection Section

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

COMMENT LETTER 2: Department of Water Resources

Response to Comment 2-1

Comment noted. As described on page 3-18 of the Draft EIR, as part of implementing the proposed project, all permits and approvals would be obtain prior to construction. As noted on page 3-21, a permit from the State Reclamation Board would be obtained for work associated with the bank stabilization project per Section 8710 of the California Water Code.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 3 – SACRAMENTO OFFICE
2389 GATEWAY OAKS DRIVE, SUITE 100
SACRAMENTO, CA 95833
PHONE (916) 274-0614
FAX (274) 274-0648
TTY (530) 741-4509

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January 3, 2006

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DEPARTMENT OF
COMMUNITY DEVELOPMENT

05YOL0047
05-YOL-80 PM 11.20
The Rivers Phase II
Draft Environmental Impact Report
SCH#2005042018

Ms. Sandra J. White
City of West Sacramento
1110 W. Capitol Avenue
West Sacramento, CA 95691

Dear Ms. White:

Thank you for the opportunity to comment on The Rivers Phase II, Draft Environmental Impact Report (DEIR). Our comments are as follows:

- According to the DEIR, Scenario A is expected to generate 4,841 daily trips (A.M. Peak at 511 and P.M. Peak at 462 trips). Scenario B is expected to generate 5,016 daily trips (A.M. Peak at 373 and P.M. peak 473 trips). Caltrans feels these numbers are lower than what would be expected. Our calculations (based on the ITE Trip Generation Report, 7th Edition) show that Scenario A would generate 5,456 daily trips (A.M. Peak at 662 trips and P.M. Peak at 523 trips). For Scenario B, we calculate a trip generation rate of 5,516 daily trips (A.M Peak at 471 and P.M. Peak at 525 trips). We would like to see the recalculation of these rates based on the ITE land use codes: 210 for single family dwellings, 230 for residential condominiums and 522 for Middle Junior/High School. 3-1

- The Transportation Study does not address impacts to I-80 / Reed Avenue and U.S. 50 / Harbor Boulevard and U.S. 50 / Jefferson Boulevard. The Study should be expanded to include these. In our previous comments regarding the Notice of Preparation (NOP), we noted that the size of this project along with others planned for the immediate area will have significant cumulative impacts to the local road network and state highways. Further, we noted that increased traffic on local roads may contribute to additional impacts to state facilities. Yet, the DEIR states that no improvements to off-site roads are proposed as part of this project (page 9, Roadways and Circulation). We would like to know if the City is requiring mitigation funding to address this issue or if not, why this issue was not addressed and evaluated in the current DEIR or Transportation Study. 3-2

- Regarding intersection operations, there is a statement that says the project does not add traffic to the northbound approach at the Douglas Street/Sacramento Avenue intersection, however, there is not any statistical data that shows the existing volume versus the proposed project volume. Thus, we cannot tell if this will be the result as concluded in the Transportation Study. 3-3

- The proposed development would drain into existing lakes from a former golf course and then to the city's storm drainage system. Additionally, drainage for the rest of the development will flow into an existing channel that outfalls to a pump station that will be upgraded for the increased flow. Because of these measures, Caltrans does not expect any adverse impacts to State facilities. 3-4

- We applaud the effort to mitigate the expected traffic impacts through a fair share contribution to the Yolo County Transportation District (YCTD) for the purchase of a bus. Further, we applaud the cooperative spirit in developing bus turnouts and sheltered bus stops for this project in order to lessen single occupant vehicle travel. 3-5

- The Transportation Plan indicates that the West Sacramento Bicycle and Pedestrian Master Plan (1995 Addendum) does not indicate planned bicycle lanes / paths or pedestrian paths within the proposed development. We feel that the Plan should include bicycle route and path facilities for this and other developments in order to provide a comprehensive and connected system of alternative mode travel facilities. This effort should also be woven into the development of transit accessibility for this development. 3-6

- The project location abuts a levee to the Sacramento River. While drainage within the project area has been addressed in the DEIR, Caltrans suggests that emergency evacuation routes (with maps) to and from the project area should be included in the final EIR in the event of a Sacramento River flood emergency. 3-7

Please provide our office with copies of any further action regarding this project. If you have any questions regarding these comments, please contact Patrick Tyner at (916) 274-0558.

Sincerely,

KATHERINE EASTHAM, Chief
Office of Transportation Planning—Southwest and East

COMMENT LETTER 3: California Department of Transportation

Response to Comment 3-1

The trip generation estimates for proposed project Scenarios A and B are based on the use of trip generation data in the Institute of Transportation Engineers (ITE) *Trip Generation* (7th Edition). The ITE *Trip Generation* Handbook is the nationally accepted standard for trip generation data.

The trip generation levels were calculated using trip generation regression equations for the residential uses and weighted average trip rates for the school use. The ITE *Trip Generation* Handbook recommends the use of the trip generation regression equation when more than 20 data points and a regression curve and equation are provided. This is the case for residential uses, and was the practice applied in developing trip generation estimates for the traffic study.

The commentor appears to have used the weighted average trip rates for the residential uses in calculating the trip generation levels identified in the letter. The weighted average trip rates do not take into account the fact that trip generation rates vary depending on the size of the project. The trip generation regression equations take that into account, and that is why they are recommended for use when provided.

Response to Comment 3-2

The EIR is an update of a previous environmental document prepared for the project site. The currently approved land use plan for the project site would allow development that would generate approximately 5,900 daily trips. The two project alternatives would generate approximately 4,800 and 5,000 daily trips, about 20 percent less than the plan that was evaluated in a previous EIR.

The City of West Sacramento has recently adopted an updated traffic development fee program. This program includes 100% funding of the ultimate improvements at the U.S. 50/Jefferson Boulevard, the U.S. 50/Harbor Boulevard, and the I-80/Reed Avenue interchanges through local development fees. The project will pay traffic impact fees that will provide the project's share of funding for these three interchange improvements.

Response to Comment 3-3

The south leg of the Sacramento Avenue/Douglas Street intersection is a driveway. It currently generates no trips during the a.m. peak hour and 13 trips (6 inbound, 7 outbound) during the p.m. peak hour. No project traffic is assigned to this minor driveway.

Response to Comment 3-4

Comment noted.

Response to Comment 3-5

Comment noted.

Response to Comment 3-6

The City of West Sacramento Bicycle and Pedestrian Master Plan does not identify Class I or II bicycle facilities within the proposed project. Pedestrian facilities are planned on all streets within the project.

Response to Comment 3-7

As discussed under Item g. on page 37 of the Initial Study (see Appendix A of the Draft EIR), the proposed residential development is not within a 100-year flood hazard area. All areas of the City that are behind the levees, such as the proposed project site, are located within Zone X, which designates the area as “protected from a 100-year storm by levees”.

In the event of an emergency, residents would be requested to evacuate south to Sacramento Avenue, west to Reed Avenue and then to I-80.

STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, Governor

CALIFORNIA STATE LANDS COMMISSION

CRUZ M. BUSTAMANTE, *Lieutenant Governor*
STEVE WESTLY, *Controller*
MICHAEL C. GENEST, *Director of Finance*

EXECUTIVE OFFICE
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 *Fax* **(916) 574-1810**
California Relay Service TDD Phone 1-800-735-2929
Voice Phone 1-800-735-2922

January 9, 2006

File Ref: W 30106
SCH: 2005042018

Ms. Nadell Gayou
The Resources Agency
901 P Street
Sacramento, CA 95814

Ms. Sandra White
Senior Planner
1110 West Capitol Avenue
West Sacramento, CA 95691

Dear Ms. White:

Staff of the California State Lands Commission (CSLC) has reviewed the city of West Sacramento's (City) Draft Environmental Impact Report (DEIR) for the Rivers Phase II Project (Project). The CSLC is a Responsible Agency for that portion of the Project that "includes installation of approximately 3,000 lineal feet of bank stabilization along the Sacramento River," and staff provides the following comments for your consideration.

Jurisdiction

The State acquired sovereign ownership of all tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all the people of the State for statewide Public Trust purposes which include waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. The landward boundaries of the State's sovereign interests in areas that are subject to tidal action are generally based upon the ordinary high water marks of these waterways as they last naturally existed. In non-tidal navigable waterways, the State holds a fee ownership in the bed of the waterway between the two ordinary low water marks as they last naturally existed. The entire non-tidal navigable waterway between the ordinary high water marks is subject to the Public Trust. The State's sovereign interests are under the jurisdiction of the State Lands Commission.

Comments

1. The DEIR does not analyze the project described in a 1991 Boundary Line Agreement (BLA), AD 112, described on page 2 of the CSLC's response to the Notice of Preparation to which the sponsor of the proposed project is bound by the terms of said Agreement. The consequence is that the CSLC does not have the ability to compare the two projects within the context of current information and analyses to determine which, on balance, will best achieve the goals and objectives of the 1991 BLA. At minimum, the original project, as described in the Lighthouse Marina and Riverbend Development Bank Protection and Greenway EIR-1996" (Lighthouse), should have been included in the DEIR as an alternative to the proposed Project. 4-1

2. The document does not correctly reflect that the lease, PRC 7967.1, for the project analyzed in the 1996 EIR, is still in effect. The document states, in part, on page 1-2, "...all previous permits relating to the bank stabilization have since expired." Were the CSLC to substitute the proposed project for that already authorized, the existing BLA and lease would need to be amended, contrary to the information provided under "State Lands Commission Lease" at page 3-21 of the DEIR. 4-2

3. The DEIR contains no analyses of potential significant impacts to hydrology (flood control) or water quality as requested by the CSLC's response to the NOP. The need for such analyses was prematurely dismissed in the NOP at page 37 on the premise that the results of the analyses of the "larger bank stabilization project", i.e., Lighthouse "....indicated that floodway encroachment would not have a significant effect on channel capacity and flood levels during both normal downstream flow and flow reversal during the largest floods.", and since the overall footprint of the proposed project would not differ from that previously evaluated that "...because the proposed project would not place new structures that would impede or redirect flood flows, impacts would be ***less than significant*** and this issue will not be evaluated in the EIR." Since 1996, much additional work and hydrologic analyses have been conducted as part of the development of the "Sacramento Riverfront Master Plan" and under the auspices of the "Sacramento River Corridor Planning Forum". The proposed bank stabilization component of the proposed project should have been evaluated with respect to its potential hydrologic impacts on flood flows using the most recent analyses, data and information pertaining to the affected area of the Sacramento River. 4-3

Furthermore, the Lighthouse EIR, specifically in Chapter 4, Flood Control and Water Quality, reveals that the relevant project could result in potential impacts related to bank erosion, particularly to areas of river bank below the area of protected bank, and water quality, the latter specifically due to the construction of the proposed bank protection, and provides mitigation to reduce such impacts to a level below the significance criteria. The currently proposed project was not analyzed in the context of either of these impact areas and thus neither identifies nor mitigates impacts of the previous project to which this proposed project has been, with respect to its impacts on flood flows, favorably compared. 4-4

Lastly, the Lighthouse EIR, at page 4-23, discusses "Storm Drain Outfall Improvements" both in terms of then existing and potential adverse impacts of existing and proposed additional outfall structures associated with the anticipated upland development on the proposed greenway and bank stabilization. The CSLC's response to the NOP, at page 3, raises several questions with respect to this issue, but such issues are not addressed in the Rivers Phase II DEIR. Impacts associated with this issue are potentially compounded by the fact that the bank stabilization is scheduled to be built prior to the development of the upland development and thus potentially before the installation of the upland storm drain system and related, but yet to be defined, outfalls. 4-5

4. The analysis of Air Quality includes, with respect to the construction of the bank stabilization, the emissions associated with the diesel-fueled crane, but does not include the emissions of the trucks that will be used to bring clean rock rip rap from Ione or the emissions from the activities that would be necessary to get the rock to a barge from the quarry in San Rafael and thence by barge to the project site. The emissions from the truck trips to the Ione quarry and back to the project site, and the emissions generated to bring the rock from San Rafael to the project site can be listed separately, since the source of the rock has not been determined, but must be included in the emissions tally for the proposed project. 4-6

5. Transportation and Circulation are analyzed solely within the bounds of the upland development. Depending on the source of the quarry rock for the proposed project, additional trucks will be added to existing transportation corridors. The number of trucks required to bring rock to the project site should be specified and the potential impacts of such additional traffic on existing roadways, e.g., LOS, should be determined. 4-7

6. The DEIR, at page 3-15, indicates that, "A three to five foot informal hiking trail of decomposed granite or similar material could be included." The Public 4-8

Services section of the DEIR does not address the potential law enforcement issues that may be associated with such a trail or the access necessary to provide ingress and egress.

4-8 (con't.)

Thank you for the opportunity to provide comments on the DEIR for the Rivers Phase II project. We appreciate the extension of the comment period provided by the City on our behalf. Please contact me at sanderd@slc.ca.gov or by telephone at (916) 574-1880 if you have any questions or desire clarification or elaboration of our comments.

Sincerely,

Dwight E. Sanders, Chief
Division of Environmental
Planning and Management

Cc: Paul D. Thayer, Executive Officer
Jim Frey, Senior Staff Counsel
Diane Jones, Division of Land Management
John Briscoe, Briscoe Ivester & Bazel LLP
Alberto Esquivel, Grupe Company
Scott Morgan, OPR

COMMENT LETTER 4: State Lands Commission

Response to Comment 4-1

The proposed bank stabilization project evaluated in the Draft EIR for the Rivers Phase II EIR is not the same as the project described in the 1991 Boundary Line Agreement. The bank stabilization project is described on page 3-15 of the Draft EIR and the boundaries are shown in Figure 3-8b found in Chapter 2 of this Final EIR.

As described in section 15126.6 of the CEQA Guidelines, an EIR must describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives and would substantially lessen identified significant effects of the project. Impacts associated with the bank stabilization project evaluated as part of the 1996 Lighthouse Marina and Riverbend Development Bank Project and Greenway EIR included (as summarized on pages 2-5 through 2-7 of the Lighthouse Marina Bank Project and Greenway EIR):

- Minor decreases in channel capacity and increase in flood levels
- Possible damage to bank protection slopes and marina due to slope failure and liquefaction during a major earthquake
- Induced bank erosion between the new marina and existing public boat launch area downstream
- Substantial erosion and failure of vegetation in a reach due to lack of full bank protection
- Temporary increase in stream turbidity and other pollutants associated with construction activities (including dredging)
- Short-term decrease in water quality associated with dredging in the proposed marina
- Possible surface water contamination associated with land disposal of dredged sediments
- Possible streambank erosion at storm drain outfalls
- Temporary increase in turbidity and suspended sediments downstream of project site
- Net loss of shaded riverine aquatic habitat after 5 years and potentially a net gain if habitat structure functions as planned
- Loss of riparian forest and scrub habitat
- Possible conflict with boat fishing when bank protection is deemed necessary
- Possible adverse effects on the Broderick Public Boat Launch
- Possible exposure of people and boats to short-term navigational hazards associated with construction of low berms in the waterway
- Alteration of the project site landscape
- Possible demolition of or damage to previously unidentified buried cultural resources
- Possible damage to underwater ship wrecks and other cultural properties if dredging is involved.

The 3,000-foot-long bank protection segment proposed under the Rivers Phase II project is a design modification of the previously evaluated, larger bank stabilization project. The overall footprint of the bank stabilization component would not differ from the larger project evaluated in the Lighthouse Marina Bank Project and Greenway EIR. Only the methods of stabilization would differ. Specifically, the previous bank stabilization project extended much further away from the current bank line and therefore much deeper into the water than the current project. The currently proposed bank stabilization project would not place much fill below the mean sea level, compared to the previously proposed project which would place fill material down to

11-feet below mean sea level. In addition, the currently proposed bank stabilization project design requires approximately 30,200 tons and 19,200 tons of fill and rip rap, respectively. The previous project required approximately 77,700 tons and 26,800 tons of fill and rip rap, respectively.

The placement of fill below mean sea level associated with the previous project would result in substantially more turbidity than the current project. The current design segregates the fill from the water by first constructing a longitudinal peak stone dike using clean quarry stone rip rap, then filling behind the dike.

There are also no dredging activities associated with the currently proposed bank stabilization project so the impacts associated with the previously proposed project would not occur. In addition, there is no storm water outfall proposed (see also Response to Comment 4-5).

Impacts identified for the Lighthouse Marina EIR bank stabilization project associated with cultural resource, geology, erosion and water quality, flooding and channel capacity and biological resources were fully evaluated in the Rivers Phase II Draft EIR. These impacts would be similar but less in magnitude that those attributed to the previous project.

Because the impacts associated with that Lighthouse Marina bank stabilization project are equal or greater in magnitude when compared to the proposed project, the City determined that it was not necessary to include the Lighthouse Marina bank stabilization project as an alternative.

Response to Comment 4-2

As stated in the October 22, 2004 letter (see letter on the following pages) to Ms. Diane Jones, Public Land Manager, California State Lands Commission, West Riverview LLC did not take an assignment on Lease PRC 7967.1. Therefore, Lease PRC 7967.1 does not require amendment. As described on page 3-21 of the Draft EIR any work would require authorization by the State Lands Commission through a lease between the Commission and the applicant.

Response to Comment 4-3

A hydraulic analysis was conducted for the proposed project which is included as Appendix C in this FEIR. In summary, the analysis evaluated two scenarios:

- Project Condition 1 – the proposed bank stabilization project alone.
- Project Condition 2 – the proposed project in combination with cumulative development components including future development along the Sacramento River that might include new bridges, docks, marinas, and vegetation enhancement. These components were defined and analyzed as part of the Sacramento River Corridor Floodway Planning Forum June 27, 2005 Hydraulic Impact Analysis of Cumulative development in the Sacramento River Corridor Floodway (Corridor Report).

The hydraulic analysis concluded that:

- Under Project Condition 1, there would be no impacts to the water surface elevation and flows in the Sacramento River. The proposed project is located in a section of the river where the hydraulic gradient is flat, therefore, any changes to vegetation along this reach would have a minimal to no effect.

- Under Project Condition 2, the proposed project in combination with cumulative development components would not change the results of the cumulative development analysis performed for the Sacramento River Corridor Floodway Planning Forum. Therefore, the conclusions of the Corridor Report would not be changed with implementation of the proposed project. The Corridor Report concluded that there were water level changes on the order of 0.1 feet downstream of the Sacramento Weir and changes of 0.2 feet upstream of the Weir. The Corridor Report found that by reducing new docks and removing new marinas upstream of the Sacramento Weir, these water level impacts could be eliminated. The Corridor Report also concluded that enhancement of riparian vegetation does not impact the system flood capacity.

Response to Comment 4-4

Potential water quality impacts associated with erosion generated during construction of the bank stabilization component of the project were evaluated in the EIR. As described under Items c., e., and f. on pages 35 and 36 of the Initial Study included as Appendix A of the Draft EIR, runoff from construction sites could contain constituents such as sediment and urban pollutants that could enter storm drains or the Sacramento River. Mitigation Measure 8 requires that the applicant prepare a comprehensive plan demonstrating how erosion, siltation and contamination of stormwater would be prevented. The plan would be approved by the City and prepared in accordance with the conditions and requirements of the NPDES General Construction Activity Stormwater permit.

As described under Item h. on page 37 of the Initial Study, the 3,000-foot-long bank protection segment proposed under the Rivers Phase II project is a slight design modification of a previously evaluated, larger bank stabilization project. The effect on water surface elevations in the Sacramento River and the potential for increased flood hazard were evaluated as part of the permitting and environmental documentation for the larger project. Results of that evaluation indicated that floodway encroachment would not have a significant effect on channel capacity and flood levels during both normal downstream flow and flow reversal during the largest floods. The overall footprint of the bank stabilization component would not differ from the larger project previously evaluated. Only the methods of stabilization would differ and there would not be any new or more severe floodway encroachment problems and the impact would be less than significant.

Response to Comment 4-5

The proposed project does not include construction and operation of the outfall identified as part of the improvements evaluated in the Lighthouse Marina EIR. Therefore, it does not require analysis in the Rivers Phase II EIR as suggested in the comment.

Response to Comment 4-6

Trucks used to transport clean rock rip rap from the quarries to the barge site would not be significant in number and the trips would occur over a short period of time (two to four months). These trips would be from one point to another and the emissions would be spread over a large area. The concentrations would not be expected to increase the risk identified and evaluated on pages 4.3-15 and 4.3-16 which was determined to be less than significant.

Response to Comment 4-7

The route for construction vehicles to access the project site would be along 5th Street and Lighthouse Drive. The vehicles would access the site via the intersection of Lighthouse Drive and Fountain Drive, which is controlled by a traffic signal. The two study intersections along this corridor are the intersections of 5th Street/C Street and Lighthouse Drive/Fountain Drive. Both intersections would operate under service level A conditions under the two Existing & Project scenarios. Since the number of construction vehicles would be substantially less than the number of trips generated by the project (i.e., estimated at approximately 4,800 daily trips for Alternative A and 5,000 daily trips for Alternative B), the addition of construction traffic would not impact the two study intersections.

Response to Comment 4-8

As described on page 4.8-7 under Impact 4.8-3 implementation of the proposed project, including the bank stabilization project, could generate the need for additional police protection services. Mitigation Measure 4.8-3 states that the City will collect sufficient funding to ensure that adequate police protection services will be provided.

Access to and from the informal trail along the bank stabilization project is shown on Figure 3-8b in Chapter 2 of this FEIR.

December 2, 2005

Sandra J. White, Senior Planner
Community Development Department
City of West Sacramento
1110 West Capitol Avenue
West Sacramento, CA 95691

Re: Response to "Rivers Phase II" Draft Environmental Impact Report

Dear Sandra:

This letter is a response to the Response to "Rivers Phase II" Draft Environmental Impact Report, specifically references to the Riparian Woodland on page 4.4-2 and "The presence of mature coniferous and deciduous trees ..." on page 4.4-5.

The hundreds of heritage and/or landmark trees proposed for removal within the riparian woodland along the Sacramento River and the trees along the fairways of the former golf course, are significant historically, environmentally, and frankly, are irreplaceable within our lifetime and that of our grandchildren. These trees provide a significant wildlife habitat for a large variety of birds including the Swainson's hawk. As the EIR states, the trees located in both the riparian area and the more manicured urban landscape provide a surprising variety of habitat types for food, nesting, and cover. 5-1

The Draft EIR does not include a reference to required Tree Permit Applications or Mitigation required prior to removal of any heritage trees. West Riverview, LLC must complete the following as required by the City of West Sacramento Tree Preservation Ordinance, Section 8.24.090 Development projects--Tree plan.

"Any application for a development project shall be accompanied by a tree plan containing the following information:
A. Contour map showing the location, size, species and condition of all existing trees which are located on the property proposed for development; 5-2
B. Identification of those trees which the applicant proposes to preserve and those heritage, landmark and street trees which are proposed to be removed and the reason for such removal;
C. A description of measures to be followed to ensure survival of heritage, landmark and street trees during construction;
D. A program for the preservation of heritage, landmark and street trees during and after completion of the project which shall include the following:
1. Each tree or group of trees to be preserved shall be enclosed with a fence prior to any grading, movement of heavy equipment, approval of improvement plans or the issuance of any permits and such fence shall be

removed following construction but prior to installation of landscaping material.
2. Fencing shall be located one foot outside of dripline of the tree or trees and shall be a minimum of six feet in height.
3. Signs shall be posted on all sides of fences surrounding each tree stating that each tree is to be preserved;
4. Any and all exposed roots shall be covered with a protective material during construction.
E. A program for the replacement of any trees proposed to be removed. Said program shall be in conformance with Section 8.24.084. (Ord. 04-01 § 3 (part))"

5-2 (con't.)

Tree permits must be completed for all species 75 inches circumference and over, and also, all oaks 50 inches circumference and over prior to any grading (within 1 foot outside the drip line), trimming or removal. Permits are available on our website under the business tab or at the front counter of the Parks and Recreation Department at the Civic Center, 1110 West Capitol Avenue. There is a $25 per tree fee which is required at the time the permits are submitted.

5-3

Thank you,

Dena Kirtley

Dena Kirtley, Tree Program Coordinator
Parks and Recreation
Certified Arborist # WC-3302
916.617.4629

cc: Toby Ross, City Manager
Bob Johnston, Director of Parks and Recreation
Gary Valine, Superintendent of Parks and Grounds

COMMENT LETTER 5: City of West Sacramento Parks and Recreation

Response to Comment 5-1

As described on page 4.4-23 of the Draft EIR, the project applicant intends to retain as many trees on the site and the riparian habitat as is feasible. As also identified, trees removed and construction activities adjacent to active nest sites could adversely impact nesting birds. Mitigation Measure 4.4-4 requires that the applicant mitigate for potential impacts by conducting pre-construction surveys and implementing measures in consultation with CDFG.

See also Response to Comment 5-2.

Response to Comment 5-2

As described on page 3-13 of the Draft EIR, the applicant would be required to comply with the requirements of the City of West Sacramento's Tree Ordinance. The requirement to comply with the City's Tree Ordinance is further described on page 21 of the Initial Study contained in Appendix A of the Draft EIR. Mitigation Measure 1 requires that tree removal or maintenance be conducted consistent with the requirements of the City's Tree Ordinance.

Implementation of Mitigation Measure 1 will be implemented and monitored as described in the Mitigation Monitoring Program prepared for the proposed project (see Chapter 5 of this Final EIR).

Response to Comment 5-3

Comment noted. The applicant with comply with the requirements contained in the City of West Sacramento's Tree Ordinance. Please see Response to Comment 5-2.

WASHINGTON UNIFIED SCHOOL DISTRICT

930 Westacre Road • West Sacramento, CA 95691
(916) 375-7604 • FAX (916) 375-7629
www.wusd.k12.ca.us

December 22, 2005

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2005
DEPARTMENT OF
COMMUNITY DEVELOPMENT

Sandra White, Senior Planner
Community Development Department
1110 West Capitol Avenue
West Sacramento, CA 95691

Subject: Draft Environmental Impact Report (DEIR)
The Rivers Phase II Development

Dear Ms. White:

Thank you for the opportunity to comment on the subject DEIR. The Washington Unified School District has the following comments:

1. The District takes exception to the findings of the DEIR with respect to noise impacts, and more specifically, the finding that noise generated by school age children on the playgrounds will create significant impacts to surrounding residents. It is our position that identification of the impact is unfounded, and that the suggested mitigation measure is arbitrary and infeasible. Our findings are based on the following:
    a. The DEIR fails to provide supportive technical data to substantiate that noise created by children on the school's playground exceeds the threshold standards of significance for non-transportation sources.
    b. The requirement to maintain a 100-foot distance between the playground and the nearest residence is arbitrary, as the DEIR contains no data to support this conclusion.
    c. The DEIR states that "schools and parks are common elements of residential development and are generally compatible uses." Indeed, schools are an allowable use under the City's General Plan and zoning. Numerous precedent setting examples exist throughout the City where a school's playground is adjacent to residences or other "sensitive noise receptors". 6-1
        i. Alyce Norman Elementary School is surrounded by residential development on three sides. Playgrounds are directly adjacent to existing single family homes. No adverse noise impacts have ever been identified.
        ii. Bryte Elementary School is contiguous to existing single family residential. Playgrounds are directly adjacent to existing single family homes. No adverse noise impacts have ever been identified.

iii. Elkhorn Elementary School is contiguous to existing single family residential. Playgrounds are directly adjacent to existing single family homes. No adverse noise impacts have ever been identified.

iv. Bridgeway Island Elementary School and City park is contiguous to existing single family homes on four sides, separated by residential streets. No adverse noise impacts have ever been identified.

v. Evergreen Elementary School and playground is contiguous to an existing retirement home. The DEIR identifies retirement homes as sensitive noise receptors. No adverse noise impacts have ever been identified.

vi. Southport Elementary School is contiguous to existing single family homes. Playgrounds are directly adjacent to existing single family homes. No adverse noise impacts have ever been identified.

vii. Westfield Village Elementary School and City park is contiguous to existing single family homes. Playgrounds are directly adjacent to existing single family homes. No adverse noise impacts have ever been identified.

viii. Westmore Oaks Elementary school is contiguous to existing single family homes. Playgrounds are directly adjacent to existing single family homes. No adverse noise impacts have ever been identified.

6-1 (con't.)

d. Noise from children playing on school playgrounds is to be expected. The DEIR states that "the proposed school is expected to be built and occupied before construction of the residential units is completed." This would mean that future homeowners would be well informed that a school is located near their property, and that noise from the playground is expected and found to be acceptable by virtue of the resident's occupancy.

e. The proposed school site is limited in size and placing use restrictions may adversely affect the District's ability to provide an approvable school site through the Department of Education.

f. Playground turf will extend to the property lines on the north, east, and west. It is not feasible to restrict where children will congregate and play within the confines of the playground.

For these reasons, the District feels that school activities and the sound of children playing would result in a less-than-significant-impact, which would not require mitigation.

2. The District recently completed a Facility Master Plan. School capacities and enrollment have been modified and differ from Table 4.8-6.

6-2

	Enrollment Oct, 2005	Capacity
Alyce Norman	497	489
Bryte	421	396
Elkhorn	498	555

Golden State	1073	1323
River City	1672	1895

6-2 (con't.)

3. The District adjusted it's Level II Developer Fee in September, 2005. The current fee is $2.95 per square foot for new residential development, not $2.54 as referenced on Page 4.8-15. The current Level I and Level II fees will be adjusted early in 2006 to reflect an inflationary increase to be approved by the State Allocation Board in January, 2006, and to reflect current costs for site acquisition and construction of facilities. 6-3

4. With respect to traffic, it should be recognized and factored into the analysis that a school's PM peak hour does not coincide with the PM peak hour used in the analysis. A school's PM peak hour typically starts at the end of a normal school day (approximately 3pm) and lasts approximately 20 minutes. 6-4

5. With respect to potential impacts on parking (reference 4.10-4), the parking standards for schools are established by the Department of Education, not the Office of Public School Construction. For elementary schools, a ratio of 2.25 parking spaces per teaching station is recommended. Twenty-one teaching stations are proposed, resulting in a minimum requirement for 47 off-street parking spaces. The current design reflects approximately 70 spaces. Mitigation measure 4.10-4 (b) will be satisfied. 6-5

Thank you again for the opportunity to comment on the DEIR. If you have any questions, please contact me at 375-7604, Ext. 2335.

Sincerely,

Denny Jones, Director
Facilities Planning & Construction

COMMENT LETTER 6: Washington Unified School District

Response to Comment 6-1

The comment is noted. Upon further evaluation and analysis, the discussion under **Analysis** for Scenario A on page 4.7-12 of the DEIR is revised to read as follows:

> **Analysis**
>
> Under Scenarios A and B, non-mobile noise sources associated with residential uses would be typical to a residential environment, and no existing stationary noise sources exist in the project vicinity that could impact new receptors. This would result in a ***less-than-significant impact*** for Scenario B.
>
> Under Scenario A, the proposed school could subject residents to maximum noise levels in excess of those allowed. Based on the preliminary school site plan for the proposed project, the school's blacktop area would be located on the western portion of the school site. This would be removed from residential receptors to the north. While some sports fields at the northern portion of the school would be within 100 feet of residences, recess activity would not likely occur at the fence line of the fields. Also, the sports fields would be large, open spaces that would not attract concentrated numbers of children in any one area. Accordingly, maximum noise levels produced at the sports fields would likely be less than the 75-78 dB associated with blacktop play areas, and the maximum daytime non-transportation noise standards for residential areas would not be exceeded.
>
> To the west, existing multi-family residential uses exist and the currently undeveloped property is zoned for high density, residential uses. The existing residential structures are located approximately 70 feet from the shared property line but over 100 feet from a blacktop area.
>
> Future high-density uses immediately west of the proposed school could conceivably be built within 100 feet of the school's proposed blacktop area. Based on the monitored data, noise levels from children playing on the blacktop during recess could exceed 70 dBA at the exterior of these future residential buildings. Newly constructed buildings have an exterior-to-interior noise attenuation of approximately 30 dBA. Accordingly, if maximum playground noise can reach 75-78 dBA, then housing built within 50 feet of the school blacktop could conceivably be exposed to maximum interior noise levels of 45-48 dBA. These maximum noise levels would be more-or-less instantaneous and periodic. Average noise levels over the course of any daytime hour would be much less than the peak maximum noise levels. Consequently, interior noise levels at future multi-family development would not likely exceed the hourly L_{eq} daytime interior standards shown in Table 4.7-3. However, exterior noise levels could exceed the daytime exterior standards shown in Table 4.7-3. This would be a ***potentially significant impact*** for Scenario A.
>
> ~~Playground noise can be mitigated through constructing barriers between the noise source and the nearest receptors, or by creating appropriate distance between noise sources and receptors. Creating barriers is not feasible for the proposed project.~~

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact for Scenario A to a *less-than-significant level*. No mitigation is required for Scenario B.

4.7-2 (A) (a) ~~*School playgrounds shall be sited at least 100 feet from the nearest residence.*~~ *The developer(s) of the future residential uses to the west of the proposed school site shall be required to conduct an acoustical study prior to approval of final site plans to determine exterior and interior noise levels. Appropriate noise attenuation measures shall be recommended and implemented as part of project design, as appropriate.*

Or

(b) *If the proposed school site is developed prior to the future residential uses west of the site, developers of the school shall conduct an acoustical study prior to approval of final site plans to determine exterior playground noise levels. Appropriate noise attenuation measures shall be recommended and implemented as part of the school design, as appropriate.*

Requiring developers of future residential uses west of the school site or the school, depending on which project is developed first, to perform acoustical studies and implement recommended design elements to reduce interior and exterior noise levels would ensure that future residents are not exposed to noise levels in excess of City standards.

Response to Comment 6-2

Comment noted. Table 4.8-6 on page 4.8-14 of the Draft EIR is updated to reflect the October 2005 enrollment figures provided by the WUSD.

TABLE 4.8-6

WASHINGTON UNIFIED SCHOOL DISTRICT ENROLLMENT AND CAPACITY FOR 2004-2005 IN SCHOOLS SERVING THE PROJECT AREA

School	Current Enrollment[1]	Total School Capacity	Available Capacity
Alyce Norman Elementary	~~445~~ 497	~~540~~ 489	~~95~~ -8
Bryte Elementary	~~408~~ 421	~~420~~ 396	~~12~~ -25
Elkhorn Elementary	~~485~~ 498	~~525~~ 555	~~40~~ 57
Golden State Middle School	~~990~~ 1073	~~1161~~ 1323	~~171~~ 250
River City High School	~~1573~~ 1672	~~1701~~ 1895	~~128~~ 223

Notes:
1. Denny Jones, Planning Facilities and Construction Director, written communication, ~~April 22, 2005~~December 22, 2005.
Source: Denny Jones, Planning Facilities and Construction Director, written communication, December 22, 2005.

The second paragraph on page 4.8-14 is revised to reflect the updated enrollment information as follows:

> As shown in Table 4.8-6, Alyce Norman Elementary ~~has a remaining capacity of 95 students,~~ and Bryte Elementary School have no remaining capacity. ~~has a remaining capacity of 12 students, and~~ As also shown in Table 4.8-6, Elkhorn Elementary has a remaining capacity of ~~40~~57 students. Golden State Middle School has a remaining capacity of ~~171~~250 students, and River City High School has a remaining capacity of ~~128~~223 students.

The last sentence in the paragraph under **Method of Analysis** on page 4.8-17 of the Draft EIR is revised to reflect the updated enrollment information as follows:

> As shown in Table 4.8-6 and described in the environmental setting for this section, district facilities in the project area have remaining capacity for ~~147~~24 elementary students, ~~171~~250 middle school students and ~~128~~223 high school students.

The last sentence of the second paragraph on page 4.8-19 of the Draft EIR is revised to reflect the updated enrollment information as follows:

> As shown in Table 4.8-6, existing WUSD elementary schools in the project area have an approximate remaining capacity of ~~147~~24 students and the middle school in the project area has a remaining capacity of approximately ~~171~~250 students.

The third sentence in the last paragraph on page 4.8-20 of the Draft EIR is revised to reflect the updated enrollment information as follows:

> Existing facilities have a combined available capacity of ~~147~~24 students.

Response to Comment 6-3

Comment noted. An adjusted WUSD Level II Developer fee of $2.95 per square foot for new residential development was adopted in September 2005.

The first full sentence on page 4.8-1 of the Draft EIR is revised to reflect the updated fee as follows:

> The WUSD assesses a fee of $~~2.54~~2.95 per square foot for new residential development, paid prior to issuance of building permits, to provide funding for additional school facilities. Current Level I and II fees will be adjusted in early 2006 to reflect an inflationary increase to be approved by the State Allocation Board and to reflect current costs for site acquisition and construction of facilities.

As required in Mitigation Measure 4.8-8, the applicant is required to pay the necessary school impact fees as mandated by State law and established by the WUSD.

Response to Comment 6-4

The pm peak hour that is evaluated occurs from 5:00 to 6:00 pm. This is the hour during which the combination of background (i.e., non-project) traffic and project traffic is at the highest level. The analysis does account for the fact that there is very little traffic generated by the school

during the evening commute period, as most afternoon traffic generated by the school occurs between 3:00 and 4:00 pm. The combination of background traffic and traffic generated by the residential units yields a higher level of traffic from 5-6 pm than the 3-4 pm hour; therefore, that is the period analyzed.

Response to Comment 6-5

Comment noted. The third paragraph under Impact 4.10-4 on page 4.10-20 is revised to read as follows:

> For Scenario A, the Washington Unified School District would use, as guidance, the site design standards prepared by the ~~California Office of Public School Construction~~ Department of Education. For elementary schools, a ratio of 2.25 parking spaces per teaching station is recommended. The school proposes to include 21 teaching stations, resulting in a minimum requirement of 47 on-site parking spaces. The current design includes a total of 70 spaces. ~~Based on the anticipated number of teachers, support staff, and administrators at the school, the~~ The District would ~~determine~~ confirm the amount of required parking for the proposed school once plans are finalized. All parking for the proposed school would be accommodated on-site.

For clarification, Mitigation Measure 4.10-4(b) is revised to read as follows:

> (b) *The school shall be designed to provide sufficient parking consistent with Department of Education Guidelines and shall ~~to~~ accommodate all parking on-site.*

GRUPE

RECEIVED
JAN 0 4 2006
DEPARTMENT OF
COMMUNITY DEVELOPMENT

VIA HAND DELIVERY

January 4, 2006

Ms. Sandra White
CITY OF WEST SACRAMENTO
1110 West Capitol Avenue
West Sacramento, CA 95691

Re: The Rivers Phase II - Draft EIR

Dear Sandra:

The following are West Riverview LLC's comments on the Draft EIR dated November 2005 for the above referenced project.

1. Project Description. The bank stabilization component of the project will include the construction of an informal hiking trail as stated on Page 3-15. The trail will run the length of Lot 305, approximately 4,220', at approximate elevation 20, between the toe of slope and the area of the bank stabilization work. The precise location of the trail will be determined in the field so as to work around existing vegetation and topography. The trail will be constructed at the same time as the bank stabilization project. A map delineating the trail is shown in Exhibit "A". A typical cross-section of the trail is attached as Exhibit "B". 7-1

2. Biological Resources (Pages 2-12 and 4.4-28). Impact Statement 4.4-9 identifies the loss of potential foraging habitat for birds of prey as a potentially significant impact, and the corresponding mitigation measure requires participation in the Yolo County H/NCCP, which to date is still only in draft form. West Riverview acknowledges that the 2.5-acre bank stabilization component may impact potential foraging habitat for birds of prey, including Swainson's hawk. The vast majority of the acreage in the residential development portion of the project, however, consists of previously developed, urbanized land, and as such is considered poor foraging habitat. (Much of the land was graded and compacted in preparation for development in the early 1990s. Previous land uses in the residential area include the former golf course and public housing that was demolished in the mid-1990s.) Additionally, biological mitigation for the residential development portion already occurred in conjunction with the prior development, and is now fully functional at the 110-acre Katchituli Oxbow site in Yolo County. (For a detailed description of the project's previous biological mitigation, please refer to the letter from Miriam Green Associates to California Fish and Game dated December 16, 2005 and attached hereto as Exhibit "C".) Without identifying which lands would be affected and without taking into account the marginal quality of foraging habitat within the residential component, Mitigation Measure 4.4-9 (A & B) vaguely references participation in the H/NCCP, which is not presently in effect. To clarify this measure, and in consideration of 7-2

THE GRUPE COMPANY
905 Lighthouse Drive, West Sacramento, CA 95605
916/372-2628 • Fax 916/372-3394

the prior mitigation's success and the marginal habitat on-site, we suggest the following modifications:

MM 4.4-9: "~~The developer shall participate in the Yolo County H/NCCP (Habitat/Natural Community Conservation Program) to satisfy the requirement to~~To mitigate the loss of Swainson's hawk foraging habitat within the bank stabilization project (riparian woodland), the developer shall either participate in the Yolo County H/NCCP (Habitat/Natural Community Conservation Program) by complying~~Participation in the H/NCCP shall mean compliance~~ with the H/NCCP mitigation strategies that are in effect prior to the issuance of a grading permit or recordation of the final map (whichever comes first) or implementation of ~~another~~ project specific mitigation plan which is deemed appropriate ~~to~~by the CDFG." 7-2 (con't.)

3. Biological Resources (page 4.4-22). The first full paragraph notes that the "project applicant has initiated formal consultation both with the NMFS and USFWS . . ." This phrase should be clarified that the "Corps has initiated formal consultation . . ." Also, consultation with the USFWS has been completed, and thus the DEIR should be revised to reflect that fact as follows: 7-3

"On October 12, 2005, USFWS concluded its review of the bank stabilization project, and found that, consistent with its previous biological opinions, the project is not likely to adversely affect federally-listed species or adversely modify critical habitat. Thus, Section 7 consultations have been completed with USFWS."

4. Biological Resources (page 4.4-22). The DEIR states that the bank stabilization project could result in loss of perennial aquatic habitat or individual pond turtles during construction. This section does not describe the long-term benefits that the project will have on pond turtles and their habitat. For example, the bank stabilization project will add significant woody debris that will serve as basking and other habitat for pond turtles. The DEIR should be revised to reflect these benefits. 7-4

5. Biological Resources (pages 4.4-22 and 4.4-23). Mitigation Measures 4.4-2(b) and 4.4-4(b) each respectively limit construction activities to certain time periods (in-water construction is limited to "July 1st to October 31st"; construction in the vicinity of active nest sites is prohibited from "March 15 through August 30"). These construction windows are derived from typical protocols, but may not take into consideration the specific characteristics of a particular site, fish movements in a given year, or other possible site-specific measures that may be employed to minimize or avoid disturbance within these construction windows. Therefore, we request revisions to these mitigation measures that will provide the flexibility to develop alternative construction windows, in consultation with the appropriate regulatory agencies, as follows: 7-5

MM 4.4-2(b): "In-water construction shall occur between July 1st to October 31st which coincides with the summer upstream migration period - the stage of development when fish are least sensitive to disturbance - or such other period deemed appropriate by CDFG, NMFS, or USFWS for protection of federal or State-listed fish species."

MM 4.4-4(b): ". . . the project applicant~~, in consultation with the City of West Sacramento and CDFG,~~ shall only construct~~delay construction~~ in the vicinity of active nest sites **after consultation with the City of West Sacramento and CDFG to determine the appropriate construction period necessary to avoid or minimize disturbance to** ~~during the breeding season (approximately March 15 through August 30) while the nest is occupied with~~ adults and/or young **during the breeding season (approximately March 15 through August 30).**" 7-5 (con't.)

6. Biological Resources (pages and 4.4-24). Mitigation Measure 4.4-4(d) sets forth specific provisions governing the loss or disturbance of an "active nest site." The term "active nest" is nowhere defined in the DEIR, though it should be noted that the draft Yolo County H/NCCP defines an active nest as a "nest tree in which nest building/refurbishment, egg-laying, incubation, feeding of juveniles is occurring." This measure also states that loss or disturbance of an "active nest site" would require "special permits," such as a Section 2081 permit under the California Fish & Game Code. This may be true, but only if such loss or disturbance causes the "take," or actual killing of a State-listed species ("take" is more narrowly defined under State, as opposed to federal law). Consequently, if an active nest is unoccupied at the time of the loss or disturbance, no special permit should be required under Section 2081 or other federal and State provisions. Therefore, the following language is proposed to be modified: 7-6

MM 4.4-4(d). "Before any unavoidable loss or disturbance of an active nest site occurs, ~~special permits would be required depending on the bird species: For a State-listed bird (i.e. Swainson's hawk),~~ the project applicant shall **consult with the applicable wildlife agency (CDFG or USFWS) concerning appropriate avoidance and mitigation measures and, if necessary for the incidental "take" of Swainson's hawk,** obtain a CDFG Section 2081 permit."

7. Cultural Resources (page 4.5-7). Impact Statement 4.5-3 and the following discussion identify the damage or destruction of prehistoric resources as a significant unavoidable impact, yet the discussion admits that no such prehistoric resources have been located at the project site. Although it is discussed as a cumulative regional impact, the impact statement should be clarified to say, "**Cumulative development in the region...**". Also, this mitigation is overly broad, particularly as it relates to "unidentified" resources. At least at a project level, it is important to note that the proposed mitigation measures are sufficient to reduce this particular impact to a less-than-significant level. In fact, to the extent cultural resources are identified during the course of construction, project activities and project specific mitigation measures would even serve to enhance cultural resources since the resources would be unlikely to be discovered or documented any other way. Thus, if prehistoric resources are actually discovered onsite and appropriate mitigation is conducted, it would seem that proper implementation of such project specific mitigation would be sufficient to reduce the project's cumulative impacts to a less-than-significant level, and the DEIR should be modified to reflect this. 7-7

8. Noise (pages 2-14 and 4.7-12). Mitigation Measure 4.7-2 (A) requires that school playgrounds be sited at least 100 feet from the nearest residence. It is not clear 7-8

whether such set-back would be measured from the dwelling units to the nearest edge of the playground, or some point within the playground where the noise levels are generated. Consequently, this mitigation should be clarified. Given the methodology of estimating noise levels, it would seem reasonable that the 100' setback be measured from the actual dwelling unit to the average location of the noise source, i.e., the center of each playground. 7-8 (con't.)

9. Public Services (page 4.8-24). Section 4.8.5c seeks to identify impacts on park facilities. It should be noted that Project residents will have access to over 40 acres of private parks and open space within the Rivers Project. Whether facilities are private or public is not relevant when measuring the overall impact on public facilities, i.e., the availability of private recreation facilities will in fact lessen the impact on public facilities. Additionally, public recreational facilities will be enhanced by the project's provision of waterfront improvements such as the proposed hiking trail. This fact should be reflected in the DEIR. 7-9

10. Public Utilities (page 4.9-6). Mitigation Measure 4.9-1 states that once the City's existing wastewater treatment plant reaches 90 percent of capacity, "development shall not occur" until construction and connection to the SRCSD interceptor is completed. The DEIR also states on page 4.9-1 that the existing treatment plant is expected to reach capacity by 2006, though it is unclear whether this means 90 percent capacity or 100 percent capacity (7.5 mgd). This latter statement should be clarified. Moreover, it is not clear from the DEIR how the City arrived at the 90 percent value. This appears to be an arbitrary number that is below the actual capacity of the existing treatment facilities. We question whether it is appropriate to deny service to new development, and to deny development altogether, where the City's treatment facilities may have excess capacity. (The existing treatment plant, as we understand, has an existing flow of 5.32 mgd, well below the 7.5 mgd threshold.) Given existing capacities at the City's wastewater treatment plants, as well as the City's ability to expand those plants (e.g., up to 16 mgd according to the DEIR), it is unclear how the City calculated its projected demand for wastewater treatment and arrived at the 90 percent figure. Additional analysis is necessary to determine whether there is a shortfall, and if so, what measures may be necessary or appropriate to address that shortfall (including increases to the City's existing capacity). Finally, the mitigation measure appears overly restrictive, in that it prohibits development from coinciding with construction of the interceptor. Because the impact (demand for wastewater treatment) will not occur until homes are actually built and occupied, this mitigation measure should be revised as follows: 7-10

MM 4.9-1. "Wastewater from the ~~initial phases of the~~ project shall be accommodated at the existing wastewater treatment plant until such time as ~~the total treatment requirements reach 90 percent of capacity. Thereafter, development shall not occur until~~ the construction and connection to the Sacramento Regional County Sanitation District (SRCSD) interceptor is completed. **If the existing wastewater treatment plant reaches capacity prior to connection to the SRCSD interceptor, the City of West Sacramento may pursue alternative treatment strategies (e.g., expansion of the existing treatment facilities) and the project**

may, with review and approval by the City, employ strategies to maintain wastewater treatment capacity for the project in the interim (e.g., storage equalization)." 7-10 (con't.)

11. Transportation & Circulation (pages 2-19 and 4.10-20). Mitigation Measure 4.10-4(b) states that since there is no on-street parking on the west side of Fountain or along Lighthouse, the school must be designed to accommodate all parking on-site. The EIR fails to recognize that there will be on-street parking available on Douglas Street, west of the school site and on Street "A" north of the school site. Also, the School District could request that the City allow on-street parking on the west side of Fountain. The mitigation measure should therefore be revised to say: 7-11

MM 4.10-4(b): "The school site shall be designed to ~~accommodate all parking on-site~~**provide sufficient parking in accordance with the site design standards prepared by the California Office of Public School Construction."**

12. Public Utilities (pages 2-20 and 4.11-13). The discussion of Impact Statement 4.11-2 identifies the need for a new water supply reservoir with an additional 1.9 MG of capacity as a result of The Rivers development, which need is documented in the City's updated Water Master Plan. The October 2005 water master plan prepared for the project by Nolte Associates, however, calculates a storage demand of only 1.71 MG. The discussion should also include a more precise analysis of the difference in impacts between Scenarios A and B. The project water master plan analyzed the storage demand for each scenario as follows: 7-12

	Total Storage Demand MG	% 1.90MG impact
City Master Plan Update, Projected Demand	1.90 MG	100%
Calculated Demand, Scenario A	1.71 MG	90%
Calculated Demand, Scenario B	1.04 MG	55%
Incremental Demand, School Site	0.67 MG	35%

Thus, cost allocation should be made according to demand. Consistent with that principle, the project anticipates that a portion of its costs to construct the reservoir will be reimbursed by future development. Moreover, Mitigation Measure 4.11-2 states that the master planned water storage (the 1.9 MG reservoir) "shall be constructed by the developer and functional prior to first occupancy within the project site." This measure is based on the statement that the development, even at first occupancy, will exceed current storage capacity. The DEIR does not adequately analyze existing and available storage capacities, and we believe unnecessarily limits occupancy at the project site. This provision also conflicts with existing requirements that West Riverview construct the new reservoir. Under an existing agreement, West Riverview can only receive a building permit so long as construction of the water reservoir has commenced. That agreement does not, however, require completion of construction before occupancy of any homes. Therefore, further analysis should be conducted in the DEIR to determine whether demand would in fact exceed capacity at first occupancy (or whether there is sufficient capacity for at least a portion of the project), and we respectfully

request that this mitigation measure be revised to conform to the existing agreement, as follows:

7-12 (con't.)

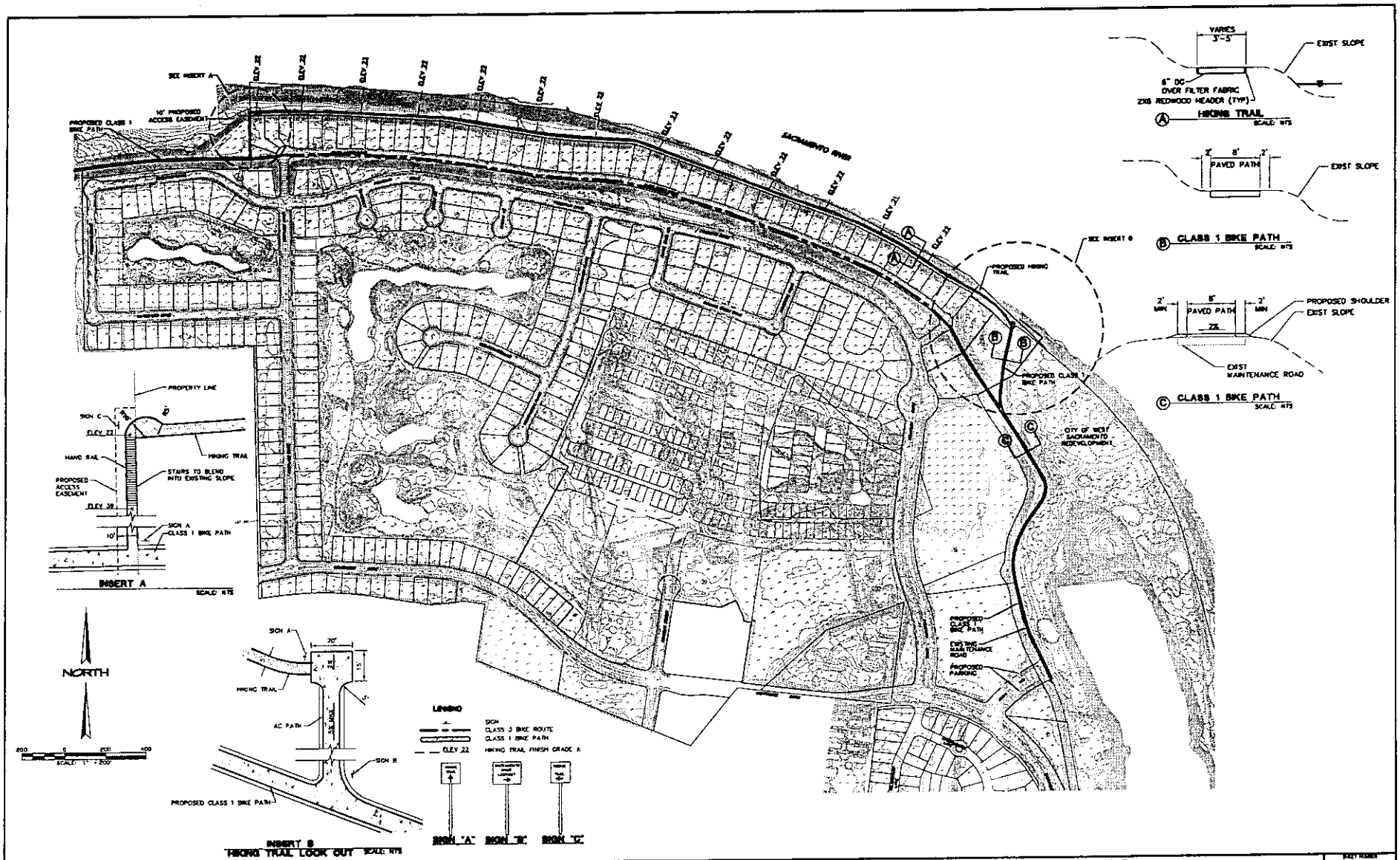
MM 4.11-2: "In accordance with the 2005 Water Master Plan Update, **the developer shall not receive a building permit until construction has commenced on** the master planned water storage **reservoir** ~~shall be constructed by the developer and functional prior to the first occupancy within the project site~~."

Thank you for your consideration of our comments. Please do not hesitate to call me directly should you have any questions concerning these comments.

Sincerely,

Alberto Esquivel
Project Manager

Exhibit A



INSERT A
SCALE: NTS

INSERT B
HIKING TRAIL LOOK OUT SCALE: NTS

DATE:	TIME:		
SURVEY:	VERIFIED:		
PATH:			
DRAWING NAME:			
PLOTTING DATE:			
DESIGNER:	FIELD BOOK:		

NO.	BY	DATE	REVISIONS

CAUTION: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

NOLTE
BEYOND ENGINEERING

THE RIVERS
PHASE II AND BANK STABILIZATION PROJECT
HIKING TRAIL CONCEPTUAL PLAN

PREPARED FOR:

DATE SUBMITTED: 11/08/2006

SHEET NUMBER 1 OF 1 SHEETS

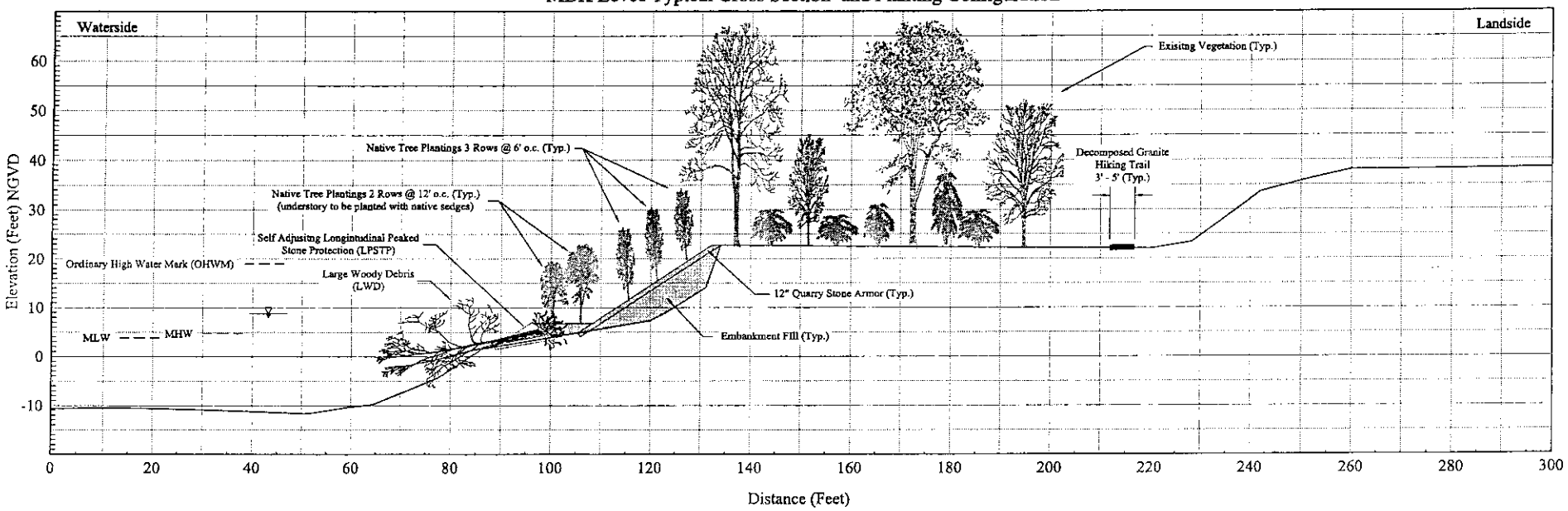
SCALE: VERTICAL: 1"=NONE HORIZONTAL: 1"=200'

JOB NUMBER 5489H006

Exhibit B

The Rivers

MBK Levee Typical Cross Section and Planting Configuration



Planting Quantity Estimate

Trees (Willow, Alder, Cottonwood)	2,000
Herbaceous (Sedge, Rush)	6,000

MBK ENGINEERS
2450 Alhambra Boulevard, 2nd Floor
Sacramento, California 95817
(916) 456-4400

Exhibit C



MIRIAM GREEN ASSOCIATES

December 16, 2005

Jenny C. Marr, Environmental Scientist
California Department of Fish and Game
Habitat Conservation Division
Sacramento Valley Central Sierra Region
1100 Fortress Avenue, Suite 2
Chico, CA 95973

RE: The Rivers Project - Phase 2, West Sacramento

Dear Jenny:

The purpose of this letter is to provide you with an understanding of off-site mitigation that has been completed for the project site currently being developed as "The Rivers Project" and formerly known as the Lighthouse Marina Project in the 1980s and 1990s, and to suggest that, due to the completion of this prior mitigation, the Project be deemed to have completed, or at least partially fulfilled, any obligations that may arise under the proposed Yolo County Habitat Conservation Plan.

During our telephone discussion on November 28, 2005, you asked me to provide you with details of the prior off-site mitigation that was required and subsequently completed for the original Lighthouse Marina Project in West Sacramento. The Lighthouse Marina Project was to be located at the same site as West Riverview LLC's "Rivers Project"; it included residential development, a marina and hotel, other commercial facilities, and a complete redesign of the existing golf course. Work on the golf course was completed and it was operated as a public course until recently. The rest of the project, with the exception of a few model homes on the land side of the levee, was never constructed.

Background

The original project proponent, Lighthouse Marina and Riverbend Development (LMRD), obtained a U.S. Army Corps of Engineers (Corps) permit in 1989 (Permit #9051) to construct the marina and to work in the river. Once the permit was issued, riparian vegetation was cleared from the river side of the levee where custom single-family homes were to have been built. The vegetation removed consisted of a linear strand of mature cottonwoods, willows, valley oaks, elderberry, and a variety of native shrubs and vines. As a condition of the Corps permit off-site mitigation for the Lighthouse Marina Project was completed in its entirety and exists today as the

restoration of riparian, oak woodland, and elderberry savannah habitats at the 110-acre Kachituli Oxbow mitigation site along the Sacramento River in Yolo County. Kachituli Oxbow has now been in existence for almost 15 years and supports 40- to 50-foot tall cottonwoods, valley oaks, at least three species of willow, Oregon ash, black walnut, box elder, and elderberries around an artificially constructed oxbow. A wide variety of birds, including several species of hawks and owls, black-tailed deer, raccoon, opossum, squirrels, rabbits, and several species of small rodents inhabit the mitigation site.

The second part of the required off-site mitigation for the restoration of riparian habitat was completed at Mary Lake, near Knight's Landing, in Sutter County. Mary Lake was a small oxbow that supported dense riparian vegetation around is perimeter, but was farmed in the interior bend. Therefore, it had excellent potential for restoration to its former riparian habitat.

Permit Conditions and Restoration Efforts

To mitigate for the loss of riparian habitat along the Sacramento River at the Lighthouse Marina project site, LMRD was required by the Corps to acquire 193 acres of open space or agricultural land along the Sacramento River in Yolo, Sacramento, or Sutter counties that was suitable for restoration to riparian habitat. Of this total, 145 acres were intended as off-site mitigation for the loss of riparian woodland (including Swainson's hawk [*Buteo swainsoni*] nesting habitat) and 48 acres were intended to serve as compensation for the loss of endangered species habitat (i.e., elderberry shrubs supporting the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). The acquisition of 193 acres was meant to satisfy the need for off-site mitigation for the entire Lighthouse Marina project, including compensation for the loss of endangered species habitat at a 3:1 replacement ratio (48 acres) and mitigation for the loss of riparian woodland at a 2:1 replacement ratio (145 acres).

Despite considerable effort by the project proponents and their representatives, a single parcel comprising 193 acres that met all the requirements of the Corps permit was not available along the Sacramento River in the specified three-county area. Accordingly, the permit was modified to allow the acquisition of mitigation land in more than one parcel as long as individual parcels met all of the other permit criteria. In partial fulfillment of this requirement, LMRD acquired the former Amen Ranch, a 284-acre parcel location along the Sacramento River in Yolo County. This property included land on both sides of the levee (24 acres on the river side and 260 acres on the land side) at River Mile 68.5R and had been used to grow tomatoes. The property also owned riparian water rights to the river.

After much discussion with the regulatory agencies and a detailed site evaluation, including a soils analysis (Kelley and Green 1990), it was agreed that 110 acres of the Amen Ranch could be used to satisfy the off-site mitigation requirement for the Lighthouse Marina Project. LMRD would be credited with reestablishing riparian vegetation on 100 acres on the land side of the levee (the portion of the property closest to the river) and restoring riparian vegetation to 10 acres on the river side of the levee, where dense riparian vegetation was cleared by the previous owners for establishment of a building site, a road, and firewood collection.

The surplus acreage of the former Amen Ranch (approximately 160 acres) on the land side of the levee was sold to the Corps to fulfill off-site mitigation requirements for the Sacramento Urban Area Levee Reconstruction Project. This site now supports approximately 40 acres of open water habitat, emergent marsh, cottonwood riparian forest, and upland habitat. It lies adjacent to the Kachituli Oxbow site to the south. The remaining 83 acres that still had to be acquired for the Lighthouse Marina Project had to be located within the levee of the Sacramento River at another site. This requirement was eventually satisfied with the restoration of Mary Lake several years later.

In its September 27, 1989 letter to LMRD, the Corps permitted clearing and grading activities to commence in the riparian corridor at the Lighthouse Marina Project and mandated that a Revegetation Plan was to be prepared that outlined the proposal for restoration of the mitigation site. After preparation of a conceptual plan and reviews by regulatory agencies and environmental groups, a final revegetation plan was prepared (Miriam Green Associates 1990). This is the plan that was implemented at the Kachituli Oxbow mitigation site.

Although escrow on the Amen Ranch closed in January, 1990, LMRD was legally bound to honor the final year of a lease agreement between the former property owner and a tenant farmer to grow tomatoes on the 260 acres on the land side of the levee. Once the tomatoes were harvested (in mid-September) the 100 acres nearest the levee were disked in preparation of the initial phase of earthmoving for the oxbow. Construction of the oxbow began in October 1990 and was completed in early 1991. The irrigation system and plants were installed over several months in 1991. By late 1990 most of the riparian vegetation on the upper terrace of the levee within the Lighthouse Marina project footprint was cleared. Individual trees along the river's edge were left intact.

Current Project Conditions

The majority of The Rivers Project - Phase 1, consisting of approximately 334 single family homes, is built out. The centerpiece of The Rivers is approximately 40 acres of open space. Most of this acreage consists of land that comprised approximately half of the former golf course. The open space contains many mature native trees, such as valley oaks, as well as many newly planted native and ornamental trees that were planted during the golf course renovation by LMRD.

The Rivers Project - Phase 2, is the subject of the recently completed Environmental Impact Report (EIR). Phase 2 includes the construction of 220 single family homes, up to 406 multi-family homes, a 12-acre school site, and a 2-acre park. The land on which Phase 2 will be developed totals 68 acres, of which 45 acres is the former golf course. The remaining 23 acres is property that has previously been graded and compacted in preparation for development. The majority of native oaks on the property will be preserved in the 2-acre park and 12-acre school sites.

As part of The Rivers - Phase 2, West Riverview LLC is proposing to install bank stabilization along approximately 3,000 linear feet of the west bank of the Sacramento River at the former Lighthouse Marina project site. Stabilization would include creation of a vegetated berm and

would incorporate woody debris into the plan. As part of the bank stabilization project approximately 2.5 acres of riparian vegetation (mostly cottonwoods and willows) below the ordinary high water mark (OHWM) would be removed. In addition, three elderberry shrubs and several smaller elderberry clusters would be removed as part of the project. The elderberries have since been transplanted to the Kachituli Oxbow mitigation site under the guidance of the U.S. Fish and Wildlife Service. Transplanting was undertaken in late February 2005. Plants were watered and monitored biweekly through October 2005.

While it may be appropriate for the regulatory agencies to require mitigation for the loss of 2.5 acres of riparian habitat along the Sacramento River below the OHWM and a monetary contribution of some as-yet-to-determined amount into the Yolo Joint Powers Authority habitat fund for the loss of Swainson's hawk foraging habitat it is not appropriate to ask West Riverview LLC to provide mitigation for 68 acres of upland habitat (i.e., former golf course and adjacent upland habitat). While this land may provide marginal foraging habitat for Swainson's hawks, off-site mitigation requirements for the entire project site have already been fulfilled by the previous project proponent, LMRD, at Kachituli Oxbow. Also, the mitigation is fully functional having been in place for nearly 15 years. Therefore, no temporal loss of habitat would occur as is the case with most projects whereby mitigation efforts begin at the same time that a project is approved. Because it takes several years for trees to mature and provide functional value to wildlife there is a temporary loss of habitat to wildlife once the original habitat is removed.

The Kachituli Oxbow mitigation site has been used only as off-site mitigation for this specific project site, although there have been two different developers involved. Swainson's hawks have been observed using Kachituli Oxbow for perching and foraging, although no nests have been recorded as yet. One historic Swainson's hawk nest site is located just upstream of the Kachituli Oxbow mitigation site, near the County public boat ramp, and suitable nesting habitat is available in the riparian corridor along this stretch of river. Red-tailed hawks, red-shouldered hawks, turkey vultures, and American kestrels have also been observed on the mitigation site and in the surrounding area.

As part of the mitigation required for The Rivers - Phase 2, West Riverview LLC would conduct nesting surveys for Swainson's hawks in the area proposed for bank stabilization. If any active nests are found, work would not commence until the young have fledged or a qualified biologist has determined that the nest has failed. No trees would be removed during the nesting season. Also, a tree survey identifying the number of trees to be removed, species, and size (diameter at breast height) will be conducted to provide baseline information for any mitigation that may be required for tree replacement.

Stewardship

Kachituli Oxbow was deeded to the State Lands Commission and is to remain under its control and stewardship in perpetuity. Access to the area is via two locked gates from River Road. No pubic use of the site is permitted. Security is limited to occasional vehicular patrols.

I hope that the details presented in this letter provide you with the background information you were seeking on the off-site mitigation that is already in place for this project site. If you are interested, I would be happy to meet with you at the Kachituli Oxbow Mitigation Site so that you can see the current condition of the property and what has been accomplished as far as riparian restoration. I also have copies of all of the documents relating to the former Lighthouse Marina Project, its acquisition of the Amen Ranch, and all agency correspondence relating to the Corps permit and off-site mitigation requirements that were fulfilled at Kachituli Oxbow.

Please feel free to call me if you have any questions. I can be reached at (916) 452-2072 or via email at *miriamgreen@earthlink.net*.

Sincerely,

Miriam Green

Miriam Green, M.S.

cc. ✓ Al Esquivel, West Riverview LLC Communities, Inc.
Sandra White, City of West Sacramento
Karen Shaffer, Gibson & Skordal, LLC
Cathy McEfee, EIP Associates

REFERENCES

Kelley, D.B. and M. Green. 1990. Soils of the Kachituli Oxbow, Yolo County, California. Prepared for Lighthouse Marina and Riverbend Development. May 14, 1990. 10 pp + appendices.

Miriam Green Associates. 1990. Kachituli Oxbow Revegetation Plan – a proposal for off-site mitigation for the Lighthouse Marina Project, West Sacramento, California. Prepared for Lighthouse Marina and Riverbend Development. October 1990. 32 pp.

COMMENT LETTER 7: West Riverview LLC

Response to Comment 7-1

The applicant provided additional information for the informal hiking trail. To reflect the additonal details the second sentence of the first full paragraph on page 3-15 of the Draft EIR is revised to read as follows:

> A three foot to five foot informal hiking trail of decomposed granite or similar material could be included. The trail would be approximately 4,220 feet in length at approximately elevation 20, between the toe of slope and the area of the proposed bank stabilization work. The precise location of the trail would be determined in the field so as to work around existing vegetation and topography. Figure 3-8a shows the location of the proposed trail.

Figure 3-8, MBK Levee Typical Cross Section, on page 3-16 of the Draft EIR has been revised to include the proposed informal hiking trail and is included in Chapter 2 of this Final EIR. In addition, the figure number is revised and the new figure number is 3-8b.

Response to Comment 7-2

Comment noted. Text under the **Mitigation Measure** heading on page 4.4-28 of the Draft EIR is revised to read as follows:

> In 1989, the U.S. Army Corps of Engineers required the project proponent for the original Lighthouse Marina project to acquire 193 acres to satisfy the need for off-site mitigation for the entire Lighthouse Marina project. Off-site mitigation was required for the loss of riparian habitat along the Sacramento River, which included compensation for the loss of endangered species habitat at a 3:1 replacement ratio (48 acres) and mitigation for the loss of riparian woodland at a 2:1 replacement ratio (145 acres). Off-site mitigation was completed for 110 acres at Kachituli Oxbow, which is located along the Sacramento River in Yolo County. The remaining 83 acres was satisfied at Mary Lake, which is a small oxbow located at Mary Lake near Knight's Landing in Sutter County.
>
> Based on a review of aerial photographs of Kachituli Oxbow, the Department of Fish and Game has determined that approximately 30 acres of the site is suitable Swainson's Hawk foraging habitat. Kachituli Oxbow has been in existence for approximately 15 years and supports a variety of 40 to 50 tall cottonwoods, valley oaks, at least three species of willow, Oregon ash, black walnut, box elder and elderberries around an artificially constructed oxbow. Due to the completion of this prior mitigation, the Department of Fish and Game has determined that 30 acres of Swainson's Hawk foraging habitat should be credited towards the proposed Rivers Phase II project.
>
> Rivers Phase II includes a total of 68 acres in addition to the bank stabilization component for a total of 70.3 acres. The improved areas of the former golf course total approximately 4.64 acres which does not qualify as Swainson's Hawk foraging habitat. Therefore, the total impacted area is 65.7 acres. Since 30 acres of Swainson's Hawk foraging habitat will be credited towards the project, 35.7 acres of Swainson's Hawk foraging habitat must be mitigated in compliance with the following mitigation strategy.

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

Mitigation Measure 4.4-9, on page 4.4-28 of the Draft EIR, is revised to read as follows:

4.4-9 (A & B) ~~*The developer shall participate in the Yolo County H/NCCP (Habitat/Natural Community Conservation Program) to satisfy the requirement to mitigate the loss of Swainson's hawk foraging habitat. Participation in the H/NCCP shall mean compliance with the mitigation strategies that are in effect prior to the issuance of a grading permit or recordation of the final map (whichever comes first) or implementation of another project specific mitigation plan which is deemed appropriate to the CDFG. In the event that the Final H/NCCP is adopted before development occurs, the developer shall participate in the Final H/NCCP to mitigate for the loss of Swainson's hawk habitat.*~~

The project applicant shall participate in the Yolo County H/NCCP (Habitat/Natural Community Conservation Program) to satisfy the requirement to mitigate the loss of Swainson's Hawk foraging habitat. Participation in the H/NCCP shall mean payment of appropriate interim mitigation fees that are in effect prior to the issuance of a grading permit or recordation of the first final map (whichever comes first) or implementation or another project specific mitigation plan which is deemed appropriate to the CDFG. In the event that the final H/NCCP is adopted before development occurs, the applicant shall participate in the Final H/NCCP to mitigate for the loss of Swainson's Hawk foraging habitat.

Response to Comment 7-3

Comment noted. The first sentence of the first full paragraph on page 4.4-22 of the Draft EIR is revised to read as follows:

As part of the 404 Nationwide permit process discussed under Impact 4.4-1, the ~~project applicant~~ Corps has initiated formal consultation both with the NMFS and USFWS for input into the design of bank protection and in-water construction activities for the bank stabilization project.

The project applicant provided updated information on the status of the formal consultation with both the USFWS and NMFS. The following text is added to following the second full paragraph on page 4.4-22 of the Draft EIR:

On October 12, 2005, the USFWS concluded its review of the bank stabilization project, and found that, consistent with its previous biological opinions, the project is not likely to adversely affect federally-listed species or adversely modify critical habitat (the letter is included as Appendix F). Thus, Section 7 consultation has been completed with the USFWS.

NMFS concluded in their March 2, 2006 latter (see Appendix D of the FEIR), that the proposed bank stabilization project would not likely adversely affect Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, or their designated

habitat. NMFS also determined that the project would not likely or adversely affect the southern DPS of the North American green sturgeon.

Response to Comment 7-4

Comment noted. To reflect the benefits provided by the bank stabilization project to western pond turtle habitat, the following text is added following the fourth full paragraph and preceding the **Mitigation Measure** header on page 4.4-22 of the Draft EIR:

> Although construction activities could result in short-term disturbance or loss due of perennial aquatic habitat, once the bank stabilization project is completed, the addition of woody debris and rock would provide long-term habitat for the western pond turtle.

Response to Comment 7-5

Comment noted. To provide flexibility to develop alternative construction windows in consultation with the appropriate regulatory agencies, Mitigation Measure 4.4-2(b) of the Draft EIR is revised to read as follows:

> (b) *In-water construction shall occur between July 1st to October 31st which coincides with the summer upstream migration period – the stage of development when fish are least sensitive to disturbance – or such other period deemed appropriate by CDFG, NMFS, or USFWS for protection of federal or State-listed fish species.*

To provide flexibility to develop alternative construction windows in consultation with the appropriate regulatory agencies, Mitigation Measure 4.4-4(b) of the Draft EIR is revised to read as follows:

> (b) *Should active bird nests be located on the project site, the project applicant~~, in consultation with the City of West Sacramento and CDFG, shall delay construction~~ shall only construct in the vicinity of active nest sites after consultation with the CDFG to determine the appropriate construction period necessary to avoid or minimize disturbance to ~~during the breeding season (approximately March 15 through August 30) while the nest is occupied with~~ adults and/or young during the breeding season (approximately March 15 through August 30). A qualified biologist shall monitor any occupied nest to determine when the nest is no longer used. If the construction cannot be delayed, avoidance shall include the establishment of a non-disturbance buffer zone around the nest site. The size of the buffer zone will be determined in consultation with the CDFG. The buffer zone shall be delineated by highly visible temporary construction fencing.*

Response to Comment 7-6

Comment noted. In order to reflect the possibility that an active nest is unoccupied at the time of the loss or disturbance and no special permit is required under Section 2081 or other federal and State provisions, Mitigation Measure 4.4-4(d) of the Draft EIR is revised to read as follows:

(d) *Before any unavoidable loss or disturbance of an active nest site occurs~~, special permits would be required depending on the bird species~~:*

- *~~For a State-listed bird (i.e. Swainson's hawk),~~ The project applicant shall consult CDFG concerning appropriate avoidance and mitigation measures and if necessary for the incidental take of Swainson's hawk. obtain a CDFG Section 2081 permit. Standard mitigation determined in consultation with CDFG for the loss of an active nest tree generally requires planting 15 trees (a mix of cottonwood, sycamore and valley oaks) and monitoring the success of the trees for five years with a 55 percent success rate.*
- *For any bird covered by the Migratory Bird Treaty Act, the project applicant would consult with the USFWS to determine appropriate mitigation measures.*
- *If any trees along the Sacramento River will be removed that support raptor nests, the tree may only be removed during the non-breeding, non-nesting season.*

Response to Comment 7-7

The City concurs that if prehistoric resources are discovered on site during project construction and the appropriate project-specific mitigation is implemented that the project's contribution to the significant cumulative impact would be reduced to a less than considerable level. Therefore, the text on page 4.5-7 under the **Mitigation Measure** header is revised to read as follows:

Mitigation Measure

Implementation of the following mitigation measure would reduce the ~~magnitude of this impact, but it would remain *significant and unavoidable.*~~project's contribution to the above mentioned impact to a *less – than-significant level.*

4.5-3 (A & B) *Implement Mitigation Measure 4.5-1 (a) through (c).*

~~However, p~~Proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing our understanding of the past environmental conditions and cultures by recording data about sites discovered and preserving artifacts found. Federal, State and local laws are also in place, as discussed above, that protect these resources; in addition, compliance with Mitigation Measure 4.5-1 (a) through (c) would ensure the proper steps are taken in the event any resources are discovered for the proper handling and treatment. ~~However, even~~ Compliance with existing regulations and ~~compliance with~~ required mitigation would ensure that the project's contribution to the potential loss of these resources would ~~not~~ be reduced to a level that would be considered less than considerable.

Response to Comment 7-8

See Response to Comment 6-1.

Response to Comment 7-9

Comment noted. To reflect the fact that residents of the proposed project would have access to private and open space facilities in the Rivers Project, the fourth paragraph on page 4.8-25 of the Draft EIR is revised to read as follows:

> Project residents would have access to over 40 acres of private parks and open space in the Rivers Project. Additionally, public recreational facilities would be enhanced by the proposed informal hiking trail. However, the private parks would only benefit residents within the development. Since the development is part of a larger community, the project would have significant impacts on the citywide park system. Consequently, the ~~The~~ proposed project would be required to provide parkland dedication or in lieu fees, as established by City standards, for the provision of park and recreation facilities within the community consistent with the City's Parks Master Plan…

Response to Comment 7-10

The City of West Sacramento's Wastewater Treatment Plant is currently at 70% capacity and is not expected to reach 90% capacity prior to the connection to the SCRSD which is scheduled for 2007 (see page 4.9-6 of the Draft EIR). Therefore, it is anticipated that the existing City wastewater treatment plant capacity will be adequate to serve the proposed project until hookup to the SCRSD occurs. To ensure that adequate wastewater treatment will be provided, Mitigation Measure 4.9-1 will not be revised.

Response to Comment 7-11

Please see Response to Comment 6-5.

Response to Comment 7-12

The ultimate storage capacity of the new water supply reservoir will be determined by a final design analysis which will be approved by the City. Consequently, additional analysis of project demand versus capacity is not warranted for either scenario A or B.

Development within the Rivers development, which includes the proposed project, triggers a water storage shortfall as documented in the City's Water Master Plan Update. The agreement executed between West Riverview and the City satisfies a condition of approval for a previously approved map (Regatta Tentative Map #4774). A condition of approval for this map required that a plan be established to provide for the timely construction of the water supply reservoir, which is ultimately necessary to serve the entire Rivers development. For health and safety purposes, construction of this facility must be completed and functional prior to the first occupancy within the Rivers Phase II project. Consequently, Mitigation Measure 4.11-2 will not be revised as requested in the comment.

The City concurs that the cost allocation should be made according to demand. Reimbursement by future development includes those properties benefiting from the construction of the facility as defined in the City's Water Master Plan.

5. MITIGATION MONITORING PROGRAM

5. MITIGATION MONITORING PROGRAM

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires review of any project that could have significant adverse effects on the environment. CEQA also requires reporting on and monitoring of mitigation measures adopted as part of the environmental review process (Public Resources Code Section 21081.6). This Mitigation Monitoring Program (MMP) is designed to aid the City of West Sacramento in its implementation and monitoring of measures adopted from the Rivers Phase II DEIR.

The mitigation measures are taken from the Rivers Phase II Draft EIR (including the Initial Study, see Appendix A of the Draft EIR) and are assigned the same number they had in the Draft EIR. The MMP is presented in table format and it describes the actions that must take place to implement each mitigation measure, the timing of those actions, the entities responsible for implementing and monitoring the actions, and the standards and verification of compliance.

5.2 MMP COMPONENTS

The components of the MMP table are summarized below.

Mitigation Measure: All mitigation measures identified in the Rivers Phase II Draft EIR are presented, and numbered as they appear in the Draft EIR. The mitigation measures from the Initial Study are identified by topic and number. Any change to the text of a mitigation measure presented in the Final EIR's Revised Summary Table is included in this MMP.

Timing/Frequency of Action: Each action must take place prior to the time at which a threshold could be exceeded. Implementation of the action must occur prior to or during some part of approval, project design or construction or on an ongoing basis. The timing for each measure is identified.

Implementation Responsibilities: Identifies the entity that will be responsible for implementing the required action.

Monitoring Responsibility: Identifies the entity that will be responsible for monitoring implementation of the required action. The City of West Sacramento is responsible for ensuring that most mitigation measures are successfully implemented. Within the City, a number of departments and divisions will have responsibility for monitoring some aspect of the overall project. Occasionally, monitoring parties outside the City are identified; these parties are referred to as "Responsible Agencies" by CEQA.

Standards for Compliance: Identifies the action that must be completed in order for the mitigation measure to be considered implemented. For every mitigation measure, one or more action is described.

Verification of Compliance: Identifies verification of compliance for each identified mitigation measure.

5.3 ABBREVIATIONS

The following abbreviations are used in the MMP table:

CDD: Community Development Department
Corps: Army Corps of Engineers
CVRWQCB: California Valley Regional Water Quality Control Board
CDFG: California Department of Fish and Game
NMFS: National Marine Fisheries Service
USFWS: United States Fish and Wildlife Service
WEAP: Worker Environmental Awareness Program
SWPPP: Stormwater Pollution Prevention Plan
BMP: Best Management Practices
H/NCCP: Habitat/Natural Community Conservation Program
WUSD: Washington Unified School District
SRCSD: Sacramento Regional County Sanitation District
YCTA: Yolo County Transit Authority
YCEHD: Yolo County Environmental Health Department
YSAQMD: Yolo-Solano Air Quality Management District
ESA: Environmental Site Assessment

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
4.3 Air Quality					
4.3-1 (A & B) The project applicant shall incorporate the following requirements into construction documents. • Soil stabilizers shall be applied to inactive areas. • Ground cover shall be replaced quickly in disturbed areas. • Exposed surfaces shall be watered three times daily. • All stock piles shall be covered with tarps. • All haul roads shall be watered twice daily. • Speed shall be reduced on unpaved roads to less than 15 miles per hour.	Prior to issuance of grading permits and during construction.	Project Applicant	CDD-Engineering	Verify that construction documents include required measures to minimize air quality impacts.	
4.3-2 (A & B) The project applicant shall incorporate the following requirements into construction documents. • Use a lean-NO_x catalyst in all applicable heavy-duty diesel equipment. • Ensure that all heavy-duty equipment engines are tuned and in proper working order.	Prior to issuance of grading permits and during construction.	Project Applicant	CDD-Engineering	Verify that construction documents include required measures to minimize air quality impacts.	
4.3-4 (A & B) (a) No wood stoves shall be installed in new residences in the proposed project. (b) SMAQMD Guide Mitigation Measure 24: Install only natural gas fireplaces. (1%) Scenario B only: (c) The Proposed Project shall ensure that Class II bike lanes are included as a component of the Project. (1%)	Prior to issuance of building permits. Prior to approval of improvement plans.	Project Applicant Project Applicant	CDD-Building, Planning CDD-Engineering	Verify that project design includes installation of only natural gas fireplaces. Verify that Class II bike lanes are included in project design.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
4.4 Biological Resources					
4.4-1 (A & B) (a) The project applicant shall obtain all appropriate permits prior to construction of the project, including a Section 404 Wetlands Fill Permit from the Corps, a Section 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board, and a Streambed Alteration Agreement (SBAA) from CDFG.	Prior to issuing grading permit for bank stabilization project.	Project Applicant	CDD-Engineering/ Corps/ CVRWQCB/ CDFG	Verify that all appropriate permits are obtained prior to issuing grading permit.	
(b) Water quality within the Sacramento River along the area of effect shall be protected using rigorous erosion control techniques during construction of the bank stabilization project. Floating silt barriers around the perimeter of all in-water construction shall be properly installed and maintained during the duration of the project to ensure that turbidity levels remain at a threshold considered acceptable by the Central Valley Regional Water Quality Control Board.	Prior to issuing grading permit and during construction for bank stabilization.	Project Applicant	CDD-Engineering/ CVRWQCB	Verify installation of erosion control measures prior to issuance of grading permits and proper maintenance of the measures during construction.	
4.4-2 (A & B) The project applicant shall consult with NMFS and USFWS to determine the extent and severity of impacts to fisheries resources, along with the implementation of appropriate mitigation measures. The following or equally effective measures shall be required. (a) River-side construction using barges to minimize impacts to existing streambank and riparian habitat (b) In-water construction shall occur between July 1st to October 31st, which coincides with the summer upstream migration period – the stage of development when fish are least sensitive to disturbance– or such other period deemed appropriate by CDFG, NMFS, or USFWS for protection of federal or State-listed fish species. (c) On-site conservation for rock placement shall be implemented as phased construction begins. As-built plans shall include the following, or equally effective mitigation measures: i. a diked bench installed to provide shallow water habitat;	Prior to issuing grading permit and during construction for bank stabilization.	Project Applicant	CDD-Engineering/ NMFS/ USFWS	Verify implementation of appropriate measures to protect fisheries resources prior to issuance of grading permits and during construction of the bank stabilization project.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
ii. collateral large woody debris anchored along the diked bench; iii. the diked bench designed to allow for frequent flooding during the winter through spring rainy season to create shallow-water habitat; (d) Conservation values managed for the life of project.					
4.4-3 (A & B) The project applicant shall retain a qualified biologist to monitor construction activities along the bank stabilization project site to ensure that no western pond turtles are injured or killed during the construction of the proposed project. Any turtles found in or near the construction zone that could potentially be injured or killed as a result of construction activities should be relocated to an appropriate location (i.e., an area of suitable habitat) that is a minimum of 100 feet downstream of the construction zone.	Prior to issuance of grading permit for bank stabilization.	Project Applicant	CDD-Engineering, Planning	Verify that a qualified biologist has been retained by the Applicant to monitor construction activities along the bank stabilization project site. Verify that all turtles found in or near the construction zone were relocated to an area of suitable habitat that is a minimum of 100 feet downstream of the construction zone.	
4.4-4 (A & B) (a) The project applicant shall retain a qualified biologist to conduct pre-construction breeding-season surveys (approximately March 15 through August 30) of the project site and vicinity during each calendar year that construction is planned to begin, in consultation with the CDFG. Phased construction procedures are planned for the proposed project; the results of the above survey shall be valid only for the season when it is conducted. A pre-construction survey report shall be submitted to the City of West Sacramento that includes, at a minimum: • A description of methodology including dates of field visits, the names of survey personnel with resumes, and a list of references cited and persons contacted. • A map showing the location(s) of any bird nests observed on the project site.	Prior to issuance of grading permits every calendar year that construction is planned.	Project Applicant	CDD-Engineering, Planning/CDFG	Verify that a qualified biologist has been retained by the Applicant and that pre-construction breeding survey reports are submitted to the City.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
(b) Should active bird nests be located on the project site, the project applicant shall only construct in the vicinity of active nest sites after consultation with the CDFG to determine the appropriate construction period necessary to avoid or minimize disturbance to adults and/or young during the breeding season (approximately March 15 through August 30). A qualified biologist shall monitor any occupied nest to determine when the nest is no longer used. If the construction cannot be delayed, avoidance shall include the establishment of a non-disturbance buffer zone around the nest site. The size of the buffer zone will be determined in consultation with the CDFG. The buffer zone shall be delineated by highly visible temporary construction fencing.	Prior to issuance of grading permits.	Project Applicant	CDD-Engineering/ CDFG	Verify that project applicant consults with the City and CDFG to determine appropriate construction period necessary to avoid or minimize disturbance to adults and/or young. Verify that a qualified biologist has been retained to monitor all occupied nests to determine when it is no longer in use. If construction can not be delayed, verify that non-disturbance buffer has been established and maintained.	
(c) No disturbances (e.g. heavy equipment operation, cranes or draglines, rock-crushing activities) or other project related activities (such as crew and equipment parking on site) which may cause nest abandonment or forced fledging, should be initiated within ¼-mile (buffer zone) of an active nest between March 1 – September 15 or until August 15 if a Management Authorization or Biological Opinion is obtained from the CDFG.	Prior to issuance of grading permits.	Project Applicant	CDD-Engineering/ CDFG	Verify that ¼ mile buffer zone has been established and maintained around active nest sites.	
(d) Before any unavoidable loss or disturbance of an active nest site occurs: • The project applicant shall consult CDFG concerning appropriate avoidance and mitigation measures and if necessary for the incidental take of Swainson's hawk, obtain a CDFG Section 2081 permit. Standard mitigation determined in consultation with CDFG for the loss of an active nest tree generally requires planting 15 trees (a mix of cottonwood, sycamore and valley oaks) and monitoring the success of the trees for five years with a	Prior to construction.	Project Applicant	CDFG/ USFWS	Verify that all appropriate permits are obtained prior to unavoidable loss or disturbance of an active nest site occurs.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
55% success rate. • For any bird covered by the Migratory Bird Treaty Act, the project applicant would consult with the USFWS to determine appropriate mitigation measures. • If any trees along the Sacramento River will be removed that support raptor nests, the tree may only be removed during the non-breeding, non-nesting season. (e) Active nest trees that would not be removed but are in close proximity to construction activities shall be monitored weekly to determine if construction activities were disturbing the adult or young birds, until the birds left the nest.	Prior to issuance of grading permit and during construction.	Project Applicant	CDD-Engineering, Planning/CDFG	Verify that a qualified biologist has been retained by the applicant to monitor all occupied nests weekly to determine if construction activities are disturbing adult and/or young birds until the nest is no longer in use.	
4.4-5 (A & B) The project applicant shall retain a qualified biologist to conduct focused surveys within the project site for rose-mallow, Sanford's arrowhead, and northern California black walnut during the appropriate time of year (April through October). If none of these species are located during the surveys, no further mitigation would be required. If any special-status plant species are located during the surveys, the project applicant shall implement seed collection and/or transplanting if necessary.	Prior to issuance of grading permits during the appropriate time of year (April through October).	Project Applicant	CDD-Engineering, Planning, USFWS	Verify that a qualified biologist has been retained by the Applicant and that focused survey reports for special-status plant species during the appropriate time of year (April through October) are submitted to the City. Verify that a qualified biologist has been retained by the applicant to implement seed collection and transplanting program and that results are submitted to the USFWS.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
4.4-6 (A & B) Prior to project construction, the project applicant shall prepare a tree report documenting the number and species of trees present within the proposed bank stabilization project, and those trees to be impacted and/or removed from within the riparian woodland. This report and a revegetation plan shall be submitted to and approved by CDFG as part of the Streambed Alteration Agreement.	Prior to issuance of grading permit for bank stabilization.	Project Applicant	Parks and Recreation – Tree Program Specialist/ CDD-Engineering/ CDFG	Verify submission and approve tree report and revegetation plan.	
4.4-8 (A & B) (a) All elderberry shrubs to be avoided during construction of the bank stabilization project shall be encircled by high visibility exclusionary fencing, at a minimum distance of 20 feet from the dripline of the elderberry shrubs to be avoided.	Prior to issuance of grading permit and during construction of bankstabilization project.	Project Applicant	CDD-Engineering	Verify installation of visible exclusionary fencing at a minimum of 20 feet from dripline of elderberry shrubs to be avoided.	
(b) The project proponent shall conduct Worker Environmental Awareness Program (WEAP) training for construction crews (primarily crew and construction foreman) before construction activities begin. The WEAP shall include a brief review of the special status species and other sensitive resources that could occur in the proposed project site (including their life history and habitat requirements and what portions of the proposed project area they may be found in) and their legal status and protection. The program shall also cover all mitigation measures, environmental permits and proposed project plans, such as the SWPPP, BMPs, erosion control and sediment plan, and any other required plans. During WEAP training, construction personnel shall be informed of the importance of avoiding ground-disturbing activities outside of the designated work area. The designated biological monitor shall be responsible for ensuring that construction personnel adhere to the guidelines and restrictions. WEAP training sessions shall be conducted as needed for new personnel brought onto the job during the construction period.	Prior to issuance of grading permit. During construction if new personnel are brought on board.	Project Applicant	CDD-Engineering	Verify development and implementation of WEAP training.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
4.4-9 (A & B) The project applicant shall participate in the Yolo County H/NCCP (Habitat/Natural Community Conservation Program) to satisfy the requirement to mitigate the loss of Swainson's Hawk foraging habitat. Participation in the H/NCCP shall mean payment of appropriate interim mitigation fees that are in effect prior to the issuance of a grading permit or recordation of the first final map (whichever comes first) or implementation or another project specific mitigation plan which is deemed appropriate to the CDFG. In the event that the final H/NCCP is adopted before development occurs, the applicant shall participate in the Final H/NCCP to mitigate for the loss of Swainson's Hawk foraging habitat.	Prior to issuance of a grading permit or recordation of the first final map, whichever comes first.	Project Applicant	CDD-Engineering, Planning	Verify implementation of appropriated mitigation plan or participation in the H/NCCP.	
4.5 Cultural Resources					
4.5-1 (A & B) (a) The project applicant shall retain qualified archeologists, who are either certified by the Society of Professional Archaeologists (SOPA) or meet the federal standards as stated in the Code of Federal Regulations (36 C.F.R. 61,) to perform on-site monitoring during all construction activities related to the bank stabilization portion of the proposed project. If archeological resources are discovered during construction all work shall stop within a 100 foot radius. The appropriate Native American Group shall be notified of the construction dates and consulted concerning mitigation if any portion of the site is found during construction. The qualified archeologist shall complete a mitigation plan for all eligible resources, which is to be reviewed and approved by the City prior to implementation. Data recovery could be required as a part of this plan. This mitigation plan shall be implemented as specified by the plan.	Prior to issuance of grading permit for bank stabilization.	Project Applicant	CDD-Engineering	Verify that a qualified archeologist has been retained by the Applicant to monitor bank stabilization construction activities. Verify that work is stopped within a 100-foot radius if any archeological resources are discovered. Verify that appropriate Native American Group has been notified. Verify submission and approval of data recovery mitigation plan.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
(b) The project applicant shall assure that project personnel are informed that collecting significant historical or unique archaeological resources discovered during development of the project is prohibited by law. Prehistoric or Native American resources can include chert or obsidian flakes, projectile points, mortars, and pestles as well as dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources can include nails, bottles, or other items often found in refuse deposits.	Prior to issuance of grading permit for bank stabilization.	Project Applicant	CDD-Engineering	Verify training of project personnel.	
(c) Any report prepared by a qualified archeologist pertaining to resources found at the project site shall be submitted to the Northwest Information Center and the City.	Anytime prior to, during, or after construction.	Project Applicant	CDD-Engineering	Verify submission to the Northwest Information Center and the City of any report pertaining to resources found at the project site. During construction activities.	
4.5-3 (A & B) Implement Mitigation Measure 4.5-1 (a) through (c).	Refer to Mitigation Measure 4.5-1 (a) through (c)				
4.7 Noise					
4.7-1 (A & B) (a) Construction activities shall be restricted to occur between the hours of 7:00 A.M. and 6:00 P.M. All internal combustion engines shall be adequately muffled and maintained. In addition, the following mitigation measure is recommended for Scenario A only:	Prior to issuance of grading permits and during construction.	Project Applicant	CDD-Engineering	Verify that measures are incorporated into construction documents. Conduct site visits to verify implementation of measures during construction activities.	
(b) Construction of the school shall include noise attenuation techniques and materials to ensure acceptable interior noise levels.	Prior to plan review and during construction.	Project Applicant	Division of the State Architect (DSA)	Verify compliance with all applicable codes through plan review and site visits.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
4.7-2 (A) (a) The developer(s) of the future residential uses to the west of the proposed school site shall be required to conduct an acoustical study prior to approval of final site plans to determine exterior and interior noise levels. Appropriate noise attenuation measures shall be recommended and implemented as part of project design, as appropriate. Or	Prior to approval of final site plans.	Developers of future residential uses to the west of the proposed school site.	CDD-Planning	Verify that an acoustical study is completed and that appropriate mitigation measures are incorporated into project design.	
(b) If the proposed school site is developed prior to the future residential uses west of the site, developers of the school shall conduct an acoustical study prior to approval of final site plans to determine exterior playground noise levels. Appropriate noise attenuation measures shall be recommended and implemented as part of the school design, as appropriate.	Prior to approval of final site plans.	Developers of future school.	CDD-Planning	Verify that an acoustical study is completed and that appropriate mitigation measures are incorporated into project design.	
4.8 Public Services					
4.8-1 (A & B) (a) The City shall collect sufficient funding for ongoing operations, including the cost of additional fire department personnel associated with the proposed project. The funds shall be generated from property taxes collected from areas that are outside the City's Redevelopment Project Area; sales taxes generated within the City; and pass through payments from the City's Redevelopment Agency to the City's General Fund.	Ongoing.	City	City	Continued collection of property taxes, sales taxes and pass through payments.	
(b) The Fire Facilities Development Fee shall be paid prior to issuance of building permits.	Prior to issuance of building permits.	Project Applicant	CDD-Engineering	Verify payment of impact fees.	
4.8-2 (A & B) Implement Mitigation Measure 4.8-1.	Refer to Mitigation Measure 4.8-2 (A & B)				
4.8-3 (A & B) (a) The City shall collect sufficient funding for ongoing operations, including the cost of additional police department personnel associated with the proposed project. Funding shall be generated from property taxes collected from areas that are outside the City's Redevelopment Project Area; sales taxes generated within the City; and pass through payments from the City's Redevelopment Agency to the City's General Fund.	Ongoing.	City	City	Continued collection of property taxes, sales taxes and pass through payments.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
(b) Facility funding shall be generated through payment of the Police Facilities Development Fee. This fee shall be paid prior to issuance of building permits.	Prior to issuance of building permits.	Project Applicant	CDD-Engineering	Verify payment of impact fees.	
4.8-4 (A & B) Implement Mitigation Measure 4.8-3.	Refer to Mitigation Measure 4.8-3.				
4.8-7 (A & B) Prior to initiation of property acquisition or development of any school facilities, WUSD shall prepare an Environmental Site Assessment consistent with the requirements and contents specified by California Education Code.	Prior to initiation of property acquisition of any school facilities.	WUSD	WUSD	Verify submission of an adequate ESA.	
4.8-8 (A & B) Prior to issuance of building permits, the developer shall pay the necessary school impact fees for the standard capital improvements fund as mandated by State law and established by the Washington Unified School District.	Prior to issuance of building permits.	Project Applicant	CDD-Building	Verify payment of required fees.	
4.8-9 (A & B) Implement Mitigation Measure 4.8-8.	Refer to Mitigation Measure 4.8-8.				
4.8-10 (A & B) Prior to issuance of any building permit, the project developer shall pay in lieu fees or provide a combination of land dedication and fees in order to maintain the City's defined parkland standards.	Prior to issuance of building permits.	Project Applicant	CDD-Engineering	Verify payment of required fees or combination of land dedication and fees.	
4.8-12 (A & B) Implement Mitigation Measure 4.8-10.	Refer to Mitigation Measure 4.8-10.				
4.9 Public Utilities					
4.9-1 (A&B) Wastewater from the initial phases of the project shall be accommodated at the existing wastewater treatment plant until such time as the total treatment requirements reach 90 percent of capacity. Thereafter, development shall not occur until the construction and connection to the Sacramento Regional County Sanitation District (SRCSD) interceptor is completed.	When the wastewater treatment plant reaches 90 percent capacity.	Project Applicant	CDD-Engineering	Verify cessation of construction once the wastewater treatment plant reaches 90 percent capacity. Verify recommencement of construction once construction and connection to the SRCSD interceptor is complete.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
4.9-2 (A&B) (a) Prior to tentative map approval, the developer shall submit engineering calculations and wastewater conveyance system design specifications to the City Engineer for review and approval. (b) Implementation of Mitigation Measure 4.9-1.	Prior to tentative map approval.	Project Applicant	CDD-Engineering	Verify submission of engineering calculations and wastewater conveyance system design specifications for review and approval.	
4.9-3 (A&B) Implement Mitigation Measure 4.9-1.	Refer to Mitigation Measure 4.9-1.				
4.9-7 (A & B) The project applicant shall hire a State registered engineer to model 100-year storm event flows and design the stormwater drainage infrastructure to convey the flows from the 100-year storm event prior to improvement plan approval.	Prior to improvement plan approval.	Project Applicant	CDD-Engineering	Verify that the Applicant has retained a State registered engineer to model and design drainage infrastructure to convey 10-year storm event flows.	
4.9-8 (A & B) Implement Mitigation Measure 4.9-7.	Refer to Mitigation Measure 4.9-7.				
4.10 Transportation and Circulation					
4.10-2 (A & B) The applicant shall be required to provide public transit facilities including bus turnouts, bus shelters and adequate lighting as required by the City's Engineering Division and the Yolo County Transit Authority. Construction of these facilities shall be phased consistent with the phased development of the project.	Prior to approval of improvement plans.	Project Applicant	CDD-Engineering	Verify design and construction of required facilities.	
4.10-4 (A & B) (a) All on-street and off-street parking shall be designed consistent with PD-29, including adopted amendments, the Zoning Ordinance, and the City's Standard Specifications. Scenario A only: (b) The school shall be designed to provide sufficient parking consistent with Department of Education Guidelines and shall accommodate all parking on-site.	Prior to approval of improvement plans and prior to issuance of building permits. Prior to approval of final site plans.	Project Applicant WUSD	CDD-Engineering, Planning WUSD	Verify that onsite parking is consistent with PD-29, zoning, and the City's Standard Specifications. Verify that the school accommodates onsite parking.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
4.10-5 (A) The applicant shall make a fair share contribution to funding the installation of a traffic signal at the intersection of Kegle Drive/Lighthouse Drive/Pierce Street.	Prior to issuance of building permits.	Project Applicant	CDD-Engineering	Verify payment of traffic impact fees.	
4.10-6 (A&B) The applicant shall make a fair share contribution to funding the addition of a southbound right-turn lane at the intersection of Kegle Drive/Jefferson Boulevard/Sacramento Avenue.	Prior to issuance of building permits.	Project Applicant	CDD-Engineering	Verify payment of traffic impact fees.	
4.10-7 (A&B) The applicant shall make a fair share contribution to funding the installation of a traffic signal at the intersection of Douglas Street/Sacramento Avenue and an eastbound left-turn lane.	Prior to issuance of building permits.	Project Applicant	CDD-Engineering	Verify payment of traffic impact fees.	
4.10-8 (A & B) Implement Mitigation Measure 4.10-2.	Refer to Mitigation Measure 4.10-2.				
4.11 Water Supply					
4.11-2 (A & B) In accordance with the 2005 Water Master Plan Update, the master planned water storage shall be constructed by the developer and functional prior to the first occupancy within the project site.	Prior to first occupancy within the project site.	Project Applicant	CDD-Engineering	Verify completion of master planned water storage.	
4.11-4 (A & B) Based on the analysis and recommendations in the 2005 Water Master Plan Update, the City should proceed with project PO7 and the recommended rate increases on the proposed timeline.	In accordance with the proposed timeline in the 2005 Water Master Plan Update.	CDD-Engineering	CDD-Engineering	Implement rate increases according to timeline.	
Initial Study – Biological Resources					
Mitigation Measure 1 The project applicant shall submit a tree plan containing the following information: a. Contour map showing the location, size, species, and condition of all existing trees which are located on the property proposed for development; b. Identification of those trees which the applicant proposes to preserve and those heritage, landmark, and street trees which are proposed to be removed and the reason for such removal;	Prior to issuance of grading permits.	Project Applicant	CDD-Engineering, Parks and Recreation	Verify submission of tree plan and compliance with Tree Preservation Ordinance.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
c. A description of measures to be followed to ensure survival of heritage, landmark, and street trees during construction; d. A program for the preservation of heritage, landmark, and street trees during and after completion of the project which shall include the following: 1. Each tree or group of trees to be preserved shall be enclosed with a fence prior to any grading, movement of heavy equipment, approval of improvement plans or the issuance of any permits and such fence shall be removed following construction but prior to installation of landscaping material; 2. Fencing shall be located one foot outside of dripline of the tree or trees and shall be a minimum of six feet in height; 3. Signs shall be posted on all sides of fences surrounding each tree stating that each tree is to be preserved; 4. Any and all exposed roots shall be covered with a protective material during construction. e. A program for the replacement of any trees proposed to be removed. Said program shall be in conformance with Section 8.24.084 of the Municipal Code. Tree permits must be completed for all species 75 inches circumference and over and all oaks 50 inches circumference and over prior to any grading (within 1 foot outside the dripline), trimming, or removal.					

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
Initial Study – Cultural Resources					
Mitigation Measure 2 The project applicant shall incorporate the following language into construction documents: • Should any evidence of either surface or subsurface historic resources be encountered during grading or excavation, work shall be suspended within 100 feet of the find, and the City of West Sacramento shall be immediately notified. At that time, the City shall coordinate any necessary investigation of the site with a qualified historical architect to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery and relocation. The contractor shall implement any measures deemed necessary by the City of West Sacramento for the protection of the historic resource.	Prior to issuance of grading permits.	Project Applicant	CDD-Engineering	Verify incorporation of language into construction documents. Verify that work is stopped within a 100 foot radius if any surface or subsurface historic resources are discovered. Verify that necessary investigations are conducted by a qualified historical architect. Verify submission and approval of data recovery mitigation plan.	
Mitigation Measure 3 The project applicant shall require incorporate the following language into construction documents: • Should any evidence of paleontological resources (e.g., fossils) be encountered during grading or excavation, work shall be suspended within 100 feet of the find, and the City of West Sacramento shall be immediately notified. At that time, the City shall coordinate any necessary investigation of the site with a qualified paleontologist to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations. The contractor shall implement any measures deemed necessary by the paleontologist for the protection of the paleontological resources.	Prior to issuance of grading permits.	Project Applicant	CDD-Engineering	Verify incorporation of language into construction documents. Verify that work is stopped within a 100 foot radius if any paleontological resources are discovered. Verify that necessary investigations are conducted by a qualified paleontologist. Verify submission and approval of data recovery mitigation plan.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
Mitigation Measure 4 The project applicant shall incorporate the following language into construction documents: • In the event of discovery or recognition of any human remains on the project site, the project sponsor shall contact the Yolo County Coroner, pursuant to Section 7050.5(b) of the California Health and Safety Code. In this event, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until (1) the Coroner determines that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and (2) the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. No further disturbance of the site may be made except as authorized by the County Coroner. The Coroner shall make the determination within two working days from the time the person responsible for the excavation, or authorized representative, notifies the Coroner of the discovery or recognition of the human remains.	Prior to issuance of grading permits.	Project Applicant	CDD-Engineering/ Yolo County Coroner	Verify incorporation of language into construction documents. Verify implementation of recommendations established by the Yolo County Coroner.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
• If the remains are Native American, the Coroner shall notify the Native American Heritage Commission, which in turn shall inform a most likely descendent. The descent will then recommend to the landowner appropriate disposition of the remains and any grave goods. Disposition may include (1) in-situ reinternment of the remains and associated artifacts and capping the site or (2) relocation and reinternment.					
Initial Study – Geology and Soils					
Mitigation Measure 5 The project applicant shall incorporate the recommendations contained in the April 22, 2004 Geotechnical Engineering Report, The Rivers Phase 2-Portions of Lots 53, 54 and 55 prepared by Wallace-Kuhl & Associates, Inc. into site preparation techniques and building and infrastructure design and construction.	Prior to issuance of grading permit and during construction.	Project Applicant	CDD-Engineering	Verify incorporation of recommendations into design documents. Conduct site visits to verify compliance.	
Mitigation Measure 6 The applicant shall prepare a grading, geotechnical and erosion control plan. The plan shall be submitted to the City of West Sacramento Engineering Division for approval prior to approval of the improvement plans.	Prior to approval of improvement plans.	Project Applicant	CDD-Engineering	Verify submission and approve a grading, geotechnical, and erosion control plan.	
Initial Study – Hazards and Hazardous Materials					
Mitigation Measure 7 (a) Prior to any activity involving site preparation and/or demolition of golf course structures, the results of a follow-up investigation to the previous Phase I ESAs for the project site shall be prepared by a qualified professional to identify whether there are any "recognized environmental conditions," as defined by the ASTM Phase I ESA standard, requiring mitigation. The evaluation shall include identification of ACBM, lead-based paint, and other structural or non-structural items that could include or be contaminated with hazardous substances. The evaluation shall also include a qualitative determination of whether past pesticide and herbicide use at the golf course could have resulted in levels of contaminants in soil or groundwater that would present a human health risk to construction workers and future single-family residential development.	Prior to issuance of grading permits and demolition permits.	Project Applicant	CDD-Building, Engineering, Planning	Verify submission of a report by a qualified professional of the results of a follow-up investigation to the previous Phase I ESA.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
(b) If the Phase I ESA recommends a Phase II evaluation, the Phase II evaluation shall be completed prior to site preparation. No site work or demolition shall occur until all hazards are identified and managed to the satisfaction of the Yolo County Environmental Health Department, City of West Sacramento, and Yolo-Solano Air Quality Management District (for asbestos abatement).	Prior to issuance of demolition and grading permits.	Project Applicant	CDD-Building, Engineering/ YCEHD/ YSAQMD	Verify (if recommended by the Phase I ESA), the submission of a Phase II evaluation by a qualified professional.	
(c) In the event that previously unidentified USTs or other features or materials that could present a threat to human health or the environment are discovered during excavation and grading, construction in that immediate area shall cease immediately. A qualified professional shall evaluate the location and hazards and make appropriate recommendations. Work shall not proceed in that area until identified hazards are managed to the satisfaction of YCEHD.	Upon discovery during excavation and grading.	Project Applicant	CDD-Engineering	Verify that Applicant has retained a qualified professional to evaluate accidental discoveries during excavation and grading.	
Initial Study – Hydrology and Water Quality					
Mitigation Measure 8 The applicant shall prepare a comprehensive plan demonstrating how erosion, siltation and contamination of stormwater shall be prevented. The plan shall be submitted to the City of West Sacramento Engineering Division for approval prior to approval of the final map. The plan shall be prepared in accordance with the conditions and requirements of the NPDES General Construction Activity Stormwater Permit.	Prior to approval of the final map.	Project Applicant	CDD-Engineering	Verify submission of a comprehensive erosion, siltation and contamination of stormwater prevention plan.	
Mitigation Measure 9 The applicant shall prepare a comprehensive plan demonstrating how post-construction stormwater quality measures shall be designed and implemented to protect receiving water quality. The plan shall be submitted to the City of West Sacramento Engineering Division for approval prior to approval of improvement plans.	Prior to approval of the improvement plans.	Project Applicant	CDD-Engineering	Verify submission of a comprehensive plan.	

RIVERS PHASE II MITIGATION MONITORING PROGRAM					
Mitigation Measure	**Timing/Frequency of Action**	**Implementation Responsibility**	**Monitoring Responsibility**	**Standards for Compliance**	**Verification of Compliance**
Initial Study - Noise					
Mitigation Measure 10 The project proponent shall incorporate the following language into construction documents: • All construction activities shall take place between the hours of 7 a.m. and 6 p.m. • Prior to any demolition and construction activity associated with the proposed project, all habited structures located within a radius of 100 feet of the construction sites shall be notified of the planned schedule of construction activities that could generate substantial groundborne vibration.	Prior to issuance of grading permit.	Project Applicant	CDD-Engineering	Verify incorporation of language into construction documents. Verify that measures are incorporated into construction documents. Conduct site visits to verify implementation of measures during construction activities.	

APPENDICES

APPENDIX A
Update to the Proposed PD-29 Text Amendments

PROPOSED AMENDMENTS TO PLANNED DEVELOPMENT 29

REPEALING AND ADOPTING AN ORDINANCE OF THE CITY OF WEST SACRAMENTO REGARDING PLANNED DEVELOPMENT 29 (PD-29)

THE CITY COUNCIL OF THE CITY OF WEST SACRAMENTO, STATE OF CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

Section One: The Zoning Map of the City of West Sacramento is amended as specified on Exhibit "A," annexed hereto and by reference made a part hereof. The following territory hereby is changed from (R-l) and PD-29, to Planned Development 29 (PD-29) Zone and subsequently annexed into and made a part of PD-29. The legal description of the property affected hereby is attached hereto as Exhibit "B" and incorporated herein by this reference. The detailed development standards applicable to the PD-29 District are set forth in Section 1 through 3, inclusive of this ordinance, which shall apply within the boundaries of the PD-29 Zone as specified herein.

These regulations are divided into several sections for the purpose of establishing the necessary controls regarding:

1. The location of the land uses, public and private facilities, and public and private buildings;
2. Height, bulk and setback limits for such land uses, public and private facilities, and public and private buildings;
3. Location and extent of existing and proposed streets and roads;
4. Standards for population density and building density, including lot sizes and permissible types of construction;
5. Standards for the conservation, development, and utilization of natural resources;
6. Implementation of applicable provisions of open space;
7. Such other measures as may be necessary or convenient to ensure execution of the General Plan, of which **The Rivers** ~~Lighthouse Marina~~ Planned Development is a part.

ARTICLE ONE REFERS TO THE GENERAL PURPOSE, INTENT AND APPLICATION.
ARTICLE TWO REFERS TO AND CONTROLS ALL RESIDENTIAL USE AREAS.
~~ARTICLE THREE REFERS TO AND CONTROLS THE BUSINESS/PROFESSIONAL USE AREA~~
ARTICLE FOUR REFERS TO AND CONTROLS ALL COMMERCIAL USE AREAS.
ARTICLE FIVE REFERS TO AND CONTROLS ALL RECREATIONAL USE AREAS.
ARTICLE SIX REFERS TO AND CONTROLS OVERLAY USE AREAS ASSOCIATED WITH PRIMARY USES.
ARTICLE SEVEN REFERS TO SPECIAL REGULATIONS ASSOCIATED WITH ALL USE AREAS.
ARTICLE EIGHT REFERS TO DEVELOPMENT PERMIT REGULATIONS AND PROCEDURES.

ARTICLE ONE: General Purpose, Intent and Application

A. General Purpose

The **Rivers** ~~Lighthouse Marina~~ Land Use Regulations are adopted for the purpose of promoting the health, safety and general welfare of **The Rivers** ~~Lighthouse Marina~~ Community. Furthermore, **The Rivers** ~~Lighthouse Marina~~ Land Use Regulations are adopted in order to achieve the following objectives:

1. Implement the intent and purpose of **The Rivers** ~~Lighthouse Marina~~ Planned Development.
2. Provide maximum opportunities for innovative community design and site planning, consistent with orderly development and protection of sensitive and natural resources, with a logical and timely sequence of community and governmental review and input.

3. Improve the visual image and general aesthetics of the Broderick community.
4. Provide for the economic revitalization of a portion of the Redevelopment Area consistent with the City of West Sacramento's approved economic development goals and objectives.
5. Stimulate new development of a mixed, high-quality nature.
6. Create an environment which will encourage a high level of property maintenance.
7. Encourage innovation in design to support the goal of a 24-hour district with mixed structures with residential uses above parking, commercial and/or office floors.

B. Intent

The PD-29 Zoning District is intended to be applied to those existing land parcels and any future land parcels created from these original parcels referenced by Assessor's Parcel Numbers as follows and as indicated on the Yolo County Assessor's rolls for the year ending 1988.

10-530-02, and
14-580-04, 06, 07, 08, and
14-590-25, 29, 32, 36, 37, 47, and
14-630-03, 06, 09, 10, 11, 21, 24, 25, 26, and
14-620-01, 02, 03, 05, 06, and
14-610-01, 02, 04, 05, 08, 09.

The limits to be observed within the PD-29 District shall be in accordance with the thirteen use areas set forth below:

PD-29 RA Residential at up to 4 dwellings per acre
PD-29 RB Residential at up to 6 dwellings per acre
PD-29 RC Residential at up to 12 dwellings per acre
PD-29 RC-A Residential at up to 12 dwellings per acre
PD-29 RD Residential at up to 22 dwellings per acre
PD-29 RE Residential at up to 38 dwellings per acre
PD-29 RF Residential at up to 62 dwellings per acre
PD-29 CT Tourist Commercial
~~PD-29 BP Business/Professional Offices~~
PD-29 CR Retail Commercial
PD-29 CM Marina Commercial
PD-29 RMH Marina/Harbor
PD-29 RGC Golf Course
PD-29 OS Open Space

Development and utilization within each of these areas shall be permitted in accordance with the standards and regulations established herein for each subarea and also in conformance with the Development Standards established for the PD-29 District, as well as the maximum intensities of use as reviewed, analyzed and publicly commented upon in the Environmental Impact Report (E.I.R.)/Environmental Impact Statement (E.I.S.) for PD-29 **or any portion of The Rivers Project** and as implemented by ~~a~~ **any applicable** Development Agreement (D.A.), Public Improvement Plan (PIP) and**/or** City Service Agreement.

C. Application

The interpretation and application of **The Rivers** ~~Lighthouse Marina~~ Land Use Regulations shall be accomplished in accordance with the following provisions:

1. The land use regulations shall be applied only in **The Rivers** ~~Lighthouse Marina~~ Planned Development Project Area.
2. The City of West Sacramento Zoning Code is auxiliary to the land use regulations of **The Rivers** ~~Lighthouse Marina~~ plan and if any item or issue is not included within the land use regulations, the regulations of the Zoning Code shall be applicable; however, the Zoning Code shall not override any provision of this land use regulation. If there is any ambiguity or uncertainty as to which regulations apply or when they apply, it will be resolved by the Community Development Director.
3. If any portion of these regulations is, for any reason, declared by a court of competent jurisdiction to be invalid or ineffective in whole or in part, such decision shall not affect the validity of the remaining portions thereof. The City Council hereby declares that it would have enacted these regulations and each portion thereof irrespective of the fact that any one or more portions be declared invalid or ineffective.
4. For the purpose of carrying out the intent and purpose of these regulations, words, phrases and terms are deemed to have the meanings ascribed to them in the City of West Sacramento Zoning Code, unless otherwise provided by these land-use regulations.
5. The provisions of Articles Seven and Eight shall apply to all zones established in Articles Two through Six.
6. The total area in acres of PD-29 shall be based upon final field boundary and title surveys. If there are any discrepancies between ~~the legal descriptions attached here as Exhibit "B"~~ **Exhibit "A"** and subsequent surveys, then the subsequent surveys shall take precedent. An increase in acreage does not grant an increase in density or intensities of use for PD-29.

ARTICLE TWO: General Provision for Residential Areas

A variety of residential areas have been established for the purpose of providing diversity and locations in housing types. The following provisions apply to all residentially zoned use areas within the planned development control area:

1. Front setbacks shall be measured from the ultimate public street right-of-way line. **Ground floor square footage shall include garage area.**
2. All construction and development within **The Rivers** ~~Lighthouse Marina~~ community shall comply with applicable provisions of the Uniform Building Code and other various Mechanical, Electrical, and Housing Codes related thereto. The codes shall prevail in the residential areas where there is any conflict between the said codes and the provisions in this text.
3. Temporary, special community events, such as parades, pageants, community fairs, athletic contests, carnivals and other similar uses, may be permitted in any area in **The Rivers** ~~Lighthouse Marina~~ community by approval of the City Council upon application for the appropriate permit.
4. Any conditions, requirements, or standards, indicated graphically or in writing that are a part of a tentative map, use permit, variance or similar permit entitlements granted by the appropriate authority shall be in conformance with **The Rivers** ~~Lighthouse Marina~~ Planned Development Land Use Regulations. Any use or development not in conformance with such conditions, requirements, or standards shall be in violation of **The Rivers** ~~Lighthouse Marina~~ Planned Development Land Use Regulations.
5. When required by these regulations, a site development permit or use permit for a specific parcel, as appropriate, shall be submitted and approved prior to the issuance of building permit, or any change of use and occupancy permit.
6. In these land use regulations, for all land use areas when more than one description may apply to a given use, the more specific description shall determine if a use is allowed, allowed subject to an approved use permit, allowed subject to an approved site plan, or prohibited.

7. Any amendment to these land use regulations must include an amendment to other sections of **The Rivers** ~~Lighthouse Marina~~ Planned Development Land Use Regulations where applicable.
8. At least twenty-one (21) calendar days prior to official action on any application for a use permit, variance permit, or building permit, the Community Development Director will forward such application to the ~~Lighthouse Marina~~ **Rivers** ~~Architectural~~ **Design** Review **Committee** ~~Board~~ for its review, recommendations and approval in accordance with Article Eight.
9. Any person, firm or corporation, whether as principal, agent, employee or otherwise, violating any provisions of these regulations shall be guilty of a misdemeanor, and upon conviction thereof shall be punishable by a fine of not more than five hundred dollars ($500.00) or by imprisonment in the County Jail of Yolo County for a term not exceeding six (6) months or by both such fine and imprisonment. Such person, firm or corporation shall be deemed guilty of a separate offense for each and every day during any portion of which any violation of this article is committed, continued or permitted by such person, firm or corporation and shall be punishable as herein provided.
10. Applications for variances to the site development standards of these regulations shall be considered and processed in accordance with the City of West Sacramento Zoning Code.
11. The following standards shall be applied to the construction of all improvements in accordance with this ordinance.
    a. Hours of operation: Exterior construction shall take place during the hours of 7:00 a.m. to 6:00 p.m.
    b. Material storage: No construction material shall be stored or stockpiled within public rights-of-way.
    c. Erosion control: Neighboring areas shall be protected from wind or water-related erosion.
    d. Parking: Adequate provisions shall be made to restrict construction crew parking to areas approved by the ~~Architectural~~ **Design** Review ~~Board~~ **Committee**.
12. The densities and intensities of use for each residential sub-area are intended as the maximum allowable. **Except as otherwise specified in the regulations for each sub-area,** nothing herein shall preclude a lesser density in any residential sub-area conditioned upon the adherence to and execution of the site development standards associated with and consistent to the designated residential type and density sub-area most closely related to the proposed residential use. If there is any uncertainty as to which regulations apply, it will be resolved by the Planning Commission.
13. Total residential units are limited to a maximum of 1,881.
14. In order to meet the purpose and intent of PD-29, mixed-use structures with residential uses above parking commercial and/or office floors is encouraged. To this end, the PD-29 RE and RF use areas may be combined with the PD-29 ~~BP~~/CR/CM/CT use areas. The site development standards for the PD-29 RE, RF, ~~BP~~, CR, CM and CT use areas are intended to encourage creative design flexibility for a single structure or cluster of structures. Approvals of mixed-use structure(s) proposal(s) will be as outlined in Article Eight.

A. PD-29 RA Single-Family Residential Use Area

1. Purpose and Intent. The PD-29 RA District is established to provide for the development and maintenance of low density single-family residential neighborhoods at up to 4 dwelling units per gross acre. Only those additional uses are permitted that are complementary to and can exist in harmony with a low density residential neighborhood. These regulations carry out the purpose and intent of the low density residential land use categories of **The Rivers** ~~Lighthouse Marina~~ Planned Development.
2. Zoning Area. The PD-29 RA zone shall be applied in **the areas shown on Exhibit "C"** ~~**(1) a single-depth arc along the existing levee from the westerly property line and (2) within**~~

~~**reasonable proximity to the golf course area**~~.

3. Permitted, Accessory and Conditional Uses
   a. PD-29 RA Principal Permitted Uses
      (1) One single-family dwelling per lot
      (2) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.
   b. PD-29 RA Permitted Accessory Uses
      (1) Small domestic animals
      (2) Rooming and boarding of not more than two (2) persons including household employees
      (3) Signs as provided for herein
      (4) Accessory uses customarily a part of the permitted use and clearly incidental and secondary to the permitted use and which do not change the character of the permitted use or affect other properties in the vicinity
      (5) Public access easements and associated improvements
      (6) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area
   c. PD-29 RA Conditional Uses. The following conditional uses may be allowed within the PD-29 RA sub-area upon the issuance of a conditional use permit by the Planning Commission.
      (1) Neighborhood day use areas
      (2) Public access ancillary uses
      (3) Public day use areas
      (4) Home occupations
      (5) Accessory uses to single-family dwellings which are not customarily a part of the permitted use
      (6) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.
4. Site Development Standards
   a. Lot Requirements
      (1) Minimum Square Footage: 7,000 Net
      (2) Minimum Width: 70’
      (3) Minimum Depth: 100’
   b. Building Regulations
      (1) Setbacks. No improvements of any kind, and no part thereof, shall be constructed, placed, extended or permitted to remain on any site closer to a property line than herein provided.
         (a) Front Yard: 20’
         (b) Side: For riverfront lots 1-51, at least 5’ on one side and at least 10’ on the other side, with the minimum distances between units being 10’ and 20’ alternately. For other RA lots, side setbacks should be any combination equaling 15, with no less than 5’ on any one side.
         (c) Rear: 15’
      (2) Setback Exceptions. The following improvements are specifically excluded from these setback provisions:
         (a) Roof overhangs, provided such overhangs do not extend more than three (3) feet

into any required yard.

(b) Steps, walks, and open arcades which have been specifically approved by the Community Development Director.

(c) Paving and associated curbing except that vehicle parking areas shall not be permitted within fifteen (15) feet of the face of curb.

(d) Fences and screen walls, except that no fence or screen wall shall be placed within the street setback area unless specifically approved by the Community Development Director.

(e) Landscaping.

(f) Planters, not to exceed two (2) feet in height, three and one-half (3 1/2) feet in overall height when planted and maximum 25 percent of public right-of-way frontage, which have been specifically approved by the Community Development Director.

(g) Underground improvements.

(3) Lot Coverage/Building Height

(a) No building site shall be covered with a building or buildings to an extent greater than 50 percent of the area of said site, excepting that an additional 10 percent of the site area may be covered with carports, open arcades, swimming pools, or similar structures if approved by the Community Development Director. This exception shall not apply to covered storage areas.

(b) Attached accessory buildings shall be considered as a part of the main building.

(c) Building width as limited by setbacks.

(d) Building height: 31' maximum as measured from established grade prior to construction across the foundation

(e) Second floor square footage: Limited to 75% of ground floor square footage

(f) A minimum of 20 percent of the site area shall be landscaped with living plant material.

c. Fences and Walls, Maximum Height

(1) Within front setback area - none allowed

(2) Within other setback areas - the maximum height shall be six (6) feet, except that this maximum may be exceeded when higher walls are required by the Community Development Director, for the purpose of noise mitigation or health and safety measures.

d. Signs

(1) No billboard or advertising sign or device shall be permitted, other than the following:

(a) Those identifying the subdivision name and not to exceed 25 square feet one side.

(b) Temporary signs offering the premises for sale or lease and not to exceed five (5) square feet one side.

(2) No temporary signs shall be within 10 feet of public tight-of-way.

(3) No permanent signage shall be erected unless the size, design and locations of such signs are approved by the Community Development Director.

(4) Freestanding appurtenant signs may be approved by the Community Development Director subject to the following:

(a) Said signs shall not exceed a height of ten (10) feet.

(b) Not more than one freestanding sign shall be allowed for each residential community area.

(c) The signs may deviate somewhat in order to provide a more attractive and more

appropriate identification of the subdivision.

e. Parking

(1) All off-street parking shall be provided in accordance with the City of West Sacramento Zoning Code and other applicable Agency requirements.

(2) Recreational vehicles, including motor homes, trailers, and boats, shall be parked in a screened location behind the front-yard setback area.

(3) No commercial vehicles shall be parked in a residential area for more than 48 hours.

f. Landscaping

(1) Every site on which a building shall have been placed shall be landscaped according to plans approved by the **Rivers** ~~Lighthouse Marina~~ **Design** ~~Architectural~~ Review **Committee** ~~Board,~~ which approval shall not be unreasonably withheld. Such landscaping shall cover all areas of the site which may be viewed by the public and shall conform to the **Rivers** ~~Lighthouse Marina~~ Design **Guidelines** ~~Standards~~**.**

(2) Provision for watering and other maintenance facilities shall be provided by the occupant in the vicinity of landscaped areas.

(3) Landscaping in accordance with the approved plan shall be installed in all areas viewed by the public prior to the issuance of necessary occupancy permits and shall be properly maintained by the occupant thereafter.

(4) Fill and excavation shall be minimized on site. Rough construction grade shall be maintained to the maximum extent possible.

B. PD-29 RB Single Family Residential Use Area

1. Purpose and Intent. The PD-29 RB District is established to provide for the development and maintenance of low-density single-family residential neighborhoods at up to 6 dwelling units per gross acre. Only those additional uses are permitted that are complementary to and can exist in harmony with a residential neighborhood. These regulations carry out the purpose and intent of the low-density residential land use categories of **The Rivers** ~~Lighthouse Marina~~ Planned Development Land Use Regulations.
2. Zoning Area. The PD-29 RB zone shall be applied **in the areas shown on Exhibit "C"** ~~along the inside tier of the levee and within or within reasonable proximity of the golf course.~~
3. Permitted, Accessory and Conditional Uses
   a. PD-29 RB Permitted Uses
      (1) One single-family dwelling per lot
      (2) As allowed under Article Two, General Provision No. 12.
      (3) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.
   b. PD-29 RB Permitted Accessory Uses. All accessory uses permitted in the PD-29 RA Zone
   c. PD-29 RB Conditional Uses. All conditional uses permitted in the PD-29 RA Zone
4. Site Development Standards
   a. Lot Requirements
      (1) Minimum Square Footage: 5,000 Net
      (2) Minimum Width: 60'
      (3) Minimum Depth: 80'
   b. Building Regulations
      (1) Setbacks. No improvements of any kind, and no part thereof, shall be constructed, placed, extended or permitted to remain on any site closer to a property line than herein provided.

(a) Front Yard: 10 feet. Garage doors shall be a minimum of 18 feet from the street right-of-way.

(b) Side: minimum 5 feet each side.

(c) Rear: 10 feet'

(2) Setback Exceptions. The following improvements are specifically excluded from these setback provisions:

(a) Roof overhangs, provided such overhangs do not extend more than three (3) feet into any required yard

(b) Steps, walks, and open arcades which have been specifically approved by the Community Development Director.

(c) Paving and associated curbing, except that guest vehicle parking areas for more than three (3) vehicles shall not be permitted within fifteen (15) feet of the street right-of-way.

(d) Fences and screen walls, except that no fence or screen wall shall be placed within the street setback area unless specifically approved by the Community Development Director.

(e) Landscaping.

(f) Planters, not to exceed two (2) feet in height, three and one-half (3 1/2) feet in overall height when planted and maximum 25 percent of public right-of way frontage, which have been specifically approved by the Community Development Director.

(g) Underground improvements

(3) Lot Coverage/Building Height

(a) No building site shall be covered with a building or buildings to an extent greater than 70 percent of the area of said site, excepting that an additional 10 percent of the site area may be covered with carports, open arcades, or similar structures if approved by the Community Development Director. This exception shall not apply to covered storage areas.

(b) Attached accessory buildings shall be considered as a part of the main building.

(c) Building width as limited by setbacks.

(d) Building height: 31' maximum.

(e) Second floor square footage: Limited to 80 percent of ground-floor square footage

(f) A minimum of 20 percent of the site area shall be landscaped with living plant material.

c. Fences and Walls, Maximum Height

(1) Within front setback area - none allowed.

(2) Within other setback areas - the maximum height shall be six (6) feet, except that this maximum may be exceeded when higher walls are required by the Community Development Director, for the purpose of noise mitigation or health and safety measures.

d. Signs

(1) No billboard or advertising sign or device shall be permitted, other than the following:

(a) Those identifying the subdivision name and not to exceed 25 square feet one side

(b) Temporary signs offering the premises for sale or lease and not to exceed five (5) square feet one side.

(2) No temporary signs shall be within 10 feet of public right-of-way.

(3) No permanent signage shall be erected unless the size, design and locations of such

signs are approved by the Community Development Director.

(4) Freestanding appurtenant signs may be approved by the Community Development Director, subject to the following:

(a) Said signs shall not exceed a height of ten (10) feet

(b) Not more than one freestanding sign shall be allowed for each residential community area.

(c) The signs may deviate somewhat in order to provide a more attractive and more appropriate identification of the subdivision.

e. Parking

(1) All off-street parking and loading shall be provided in accordance with City of West Sacramento Zoning Code and other applicable Agency requirements.

(2) Recreational vehicles including motor homes, trailers, and boats shall be parked in a screened location behind the front-yard setback area.

(3) No commercial vehicles shall be parked in a residential area for more than 48 hours.

f. Landscaping

(1) Every site on which a building shall have been placed shall be landscaped according to plans approved by the **Rivers** ~~Lighthouse Marina Architectural~~ **Design** Review **Committee** ~~Board~~, which approval shall not be unreasonably withheld. Such landscaping shall cover all areas of the site which may be viewed by the public and shall conform to the ~~Lighthouse Marina~~ **Rivers** Design **Guidelines** ~~Standards~~.

(2) Provision for watering and other maintenance facilities shall be provided by the occupant in the vicinity of landscaped areas.

(3) Landscaping in accordance with the approved plan shall be installed in all areas viewed by the public prior to the issuance of necessary occupancy permits and shall be properly maintained by the occupant thereafter.

(4) Fill and excavation shall be minimized on site. Rough construction grade shall be maintained to the maximum extent possible.

C. PD-29 RC Residential Use Area

1. Purpose and Intent. The PD-29 RC District is established to provide for the development and maintenance of higher density single family residential neighborhoods at up to 12 dwelling units per gross acre. No more than six (6) units shall have contiguous zero lot lines. Only those additional uses are permitted that are complementary to, and can exist in harmony with, a residential neighborhood. These regulations carry out the purpose and intent of the Medium Density Residential land use categories of **The Rivers** ~~Lighthouse Marina~~ Planned Development.
2. Zoning Area. The PD-29 RC zone shall be applied in **the areas shown on Exhibit "C"** ~~a selective area within or within reasonable proximity to the golf course~~.
3. Permitted, Accessory and Conditional Uses
   a. PD-29 RC Permitted Uses
      (1) One single-family dwelling per lot
      (2) As noted in Article Two, General Provision No. 12
      (3) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.
   b. PD-29 RC Permitted Accessory Uses. All accessory uses permitted in the PD-29 RA Zone.
   c. PD-29 RC Conditional Uses. All conditional uses permitted in the PD-29 RA Zone.
4. Site Development Standards

a. Lot Requirements
   (1) Minimum Square Footage: 2,800 Net
   (2) Minimum Width: 35’
   (3) Minimum Depth: 80’
b. Building Regulations
   (1) Setbacks: No improvements of any kind and no part thereof shall be constructed, placed, extended or permitted to remain on any site closer to a property line than herein provided.
      (a) Front Yard: 18’ unless automatic garage door openers are used in which case setback may be reduced to 10’
      (b) Side: None required
      (c) Rear: 15’
   (2) Setback Exceptions: The following improvements are specifically excluded from these setback provisions:
      (a) Roof overhangs, provided such overhangs do not extend more than three (3) feet into any required yard.
      (b) Steps, walks, and open arcades which have been specifically approved by the Community Development Director.
      (c) Paving and associated curbing, except that guest vehicle parking areas for more than three (3) vehicles shall not be permitted within fifteen (15) feet of the street right-of-way.
      (d) Fences and screen walls, except that no fence or screen wall shall be placed within the street setback area unless specifically approved by the Community Development Director.
      (e) Landscaping
      (f) Planters, not to exceed two (2) feet in height, three and one-half (31/2) feet in overall height when planted and maximum 25 percent of public right-of-way frontage, which have been specifically approved by the Community Development Director.
      (g) Underground improvements
   (3) Lot Coverage/Building Height
      (a) No building site shall be covered with a building or buildings to an extent greater than seventy (70) percent of the area of said site, excepting that an additional ten (10) percent of the site area may be covered with open arcades, or similar structures if approved by the Community Development Director. This exception shall not apply to covered storage areas.
      (b) Attached accessory buildings shall be considered as a part of the main building.
      (c) Building width as limited by setbacks.
      (d) Building height: 31’ maximum
      (e) Second floor square footage: Limited to 95% of ground floor square footage
c. Fences and Walls, Maximum Height
   (1) Within front setback area - none allowed
   (2) Within other setback areas - the maximum height shall be six (6) feet, except that this maximum may be exceed when higher walls are required by the Community Development Director, for the purpose of noise mitigation or health and safety measures.
d. Signs

(1) No billboard or advertising sign or device shall be permitted, other than the following:
   (a) Those identifying the subdivision name and not to exceed 25 square feet one side.
   (b) Temporary signs offering the premises for sale or lease and not to exceed five (5) square feet one side
(2) No temporary signs shall be within 10 feet of public right-of-way.
(3) No permanent signage shall be erected unless the size, design and locations of such signs are approved by the Community Development Director.
(4) Freestanding appurtenant signs may be approved by the Community Development Director, subject to the following:
   (a) Said signs shall not exceed a height of ten (10) feet.
   (b) Not more than one freestanding sign shall be allowed for each residential community area.
   (c) The signs may deviate somewhat in order to provide a more attractive and more appropriate identification of the subdivision

e. Parking
(1) All off-street parking shall be provided. in accordance with the City of West Sacramento Zoning Code and other applicable Agency requirements.
(2) Recreational vehicles including motor homes, trailers, and boats shall be parked in a screened location behind the front-yard setback area.
(3) No commercial vehicles shall be parked in a residential area for more than 48 hours.

f. Landscaping
(1) Every site on which a building shall have been placed shall be landscaped according to plans approved by the Community Development Director, which approval shall not be unreasonably withheld. Such landscaping shall cover a minimum of ten percent of the site.
(2) Provision for watering and other maintenance facilities shall be provided by the occupant in the vicinity of landscaped areas.
(3) Landscaping in accordance with the approved plan shall be installed prior to the issuance of necessary occupancy permits and shall be properly maintained by the occupant thereafter.

D. PD-29 RC-A Residential Use Area

1. Purpose and Intent: The PD-29 RC-A District is established to provide for the development and maintenance of higher density single family residential neighborhoods at up to 12 dwelling units per gross acre. Only those additional uses are permitted that are complementary to, and can exist in harmony with, a residential neighborhood. These regulations carry out the purpose and intent of the Medium Density Residential land use categories of The River Planned Development.

2. Zoning Area. The PD-29 RC-A zone shall be applied in the areas shown on Exhibit "C".

3. Permitted, Accessory and Conditional Uses

a. PD-29 RC-A Permitted Uses
(1) One single-family dwelling per lot
(2) Park and recreational facilities
(3) School facilities
(4) As noted in Article Two, General Provision No. 12
(5) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

b. PD-29 RC-A Permitted Accessory Uses. All accessory uses permitted in the PD-29 RA Zone.

c. PD-29 RC-A Conditional Uses. All conditional uses permitted in the PD-29 RA Zone.

4. Site Development Standards

a. Lot Requirements

(1) Minimum Square Footage: 2,500 net square feet.

(2) Minimum Width: 35'

(3) Minimum Depth: 70'

b. Building Regulations

(1) Setbacks: No improvements of any kind, and no part thereof shall be constructed, placed, extended or permitted to remain on any site closer to a property line than herein provided.

(a) Front Yard: 18' unless i) automatic garage door openers are used in which case setback may be reduced to 10' or ii) garage is located at the rear in which case setback may be reduced to 10' for living area, 7' for a porch, and 3' for a courtyard.

(b) Side: None required.

(c) Rear: 15' unless garage is located at the rear in which case setback may be reduced to 4'.

(2) Setback Exceptions: The following improvements are specifically excluded from these setback provisions:

(a) Roof overhangs, provided such overhangs do not extend more than three (3) feet into any required yard.

(b) Steps, walks, and open arcades which have been specifically approved by the Community Development Director.

(c) Paving and associated curbing, except that guest vehicle parking areas for more than three (3) vehicles shall not be permitted within fifteen (15) feet of the street right-of-way.

(d) Fences and screen walls, except that no fence or screen wall shall be placed within the street setback area unless specifically approved by the Community Development Director.

(e) Landscaping

(f) Planters, not to exceed two (2) feet in height, three and one-half (3 ½) feet in overall height when planted and maximum 25 percent of public right-of-way frontage, which have been specifically approved by the Community Development Director.

(g) Underground improvements.

(3) Lot Coverage/Building Height

(a) No building site shall be covered with a building or buildings to an extent greater than seventy (70) percent of the area of said site, excepting that an additional ten (10) percent of the site area may be covered with open arcades, or similar structures if approved by the Community Development Director. This exception shall not apply to coverage storage areas.

(b) Attached accessory buildings shall be considered as part of the main building.

(c) Building width as limited by setbacks.

(d) Building height: 31' maximum

(e) Second floor square footage: Limited to 95% of ground floor square footage.

c. Fences and Walls, Maximum Height

(1) Within front setback area – 3' maximum

(2) Within other setback areas – the maximum height shall be six (6) feet, except that this maximum may be exceeded when higher walls are required by the Community Development Director, for the purpose of noise mitigation or health and safety measures.

d. Signs

(1) No billboard or advertising sign or device shall be permitted, other than the following:

(a) Those identifying the subdivision name and not to exceed 25 square feet on one side.

(b) Temporary signs offering the premises for sale or lease and not to exceed five (5) square feet on one side.

(2) No temporary signs shall be within 10 feet of public right-of-way.

(3) No permanent signage shall be erected unless the size, design and locations of such signs are approved by the Community Development Director.

(4) Freestanding appurtenant signs may be approved by the Community Development Director, subject to the following:

(a) Said signs shall not exceed a height of ten (10) feet.

(b) Not more than one freestanding sign shall be allowed for each residential community area.

(c) The signs may deviate somewhat in order to provide a more attractive and more appropriate identification of the subdivision.

e. Parking

(1) A minimum of two (2) off-street parking spaces per unit shall be provided.

(2) Recreational vehicles including motor homes, trailers, and boats shall be parked in a screened location behind the front-yard setback area.

(3) No commercial vehicles shall be parked in a residential area for more than 48 hours.

f. Landscaping

(1) Every site on which a building shall have been placed shall be landscaped according to plans approved by the Community Development Director, which approval shall not be unreasonably withheld. Such landscaping shall cover a minimum of ten percent of the site.

(2) Provision for watering and other maintenance facilities shall be provided by the occupant in the vicinity of landscaped areas.

(3) Landscaping in accordance with the approved plan shall be installed prior to the issuance of necessary occupancy permits and shall be properly maintained by the occupant thereafter.

E. PD-29 RD Condominium and Apartment Use Area

1. Purpose and Intent. The PD-29 RD District is established to provide for the development and maintenance of residential neighborhoods **of** ~~which are predominately, but not exclusively, multiple family in character, for~~ condominium, **common interest** and/or apartment dwellings at up to 22 dwelling units per gross acre. Only those additional uses are permitted that are complementary to, and can exist in harmony with, a residential neighborhood. These regulations carry out the purpose and intent of the Medium Density Residential land use categories of **The Rivers** ~~Lighthouse Marina~~ Development.

2. Zoning Area. The PD-29 RD zone shall be applied in the **areas shown on Exhibit "C"** ~~reasonable proximity of the south and east edge of the golf course~~.

3. Permitted, Accessory and Conditional Uses

   a. PD-29 RD Permitted Uses

      (1) **Single family and** multifamily development at up to 22 units an acre ~~with on-site recreational facilities~~.

      (2) **Park and recreational facilities.**

      (3) **School facilities.**

      (4) As noted in Article Two, General Provision No. 12.

      (5) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

   b. PD-29 RD Permitted Accessory Uses

      (1) Small domestic animals

      (2) Rooming and boarding of not more than two (2) persons per unit including household employees

      (3) Signs as provided for herein.

      (4) Accessory uses customarily a part of and clearly incidental to the permitted use or association use

      (5) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

   c. PD-29 RD Conditional Uses. The following conditional uses may be allowed within the PD-29 RD sub-area upon the issuance of a conditional use permit by the Planning Commission.

      (1) Neighborhood day use areas

      (2) Public access ancillary uses

      (3) Public day use areas

      (4) Concessionary stands intended solely for the use or provisions of association members

      (5) Day care centers

      (6) Accessory uses not customarily a part of the permitted use or association use

      (7) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

4. Site Development Standards

   a. General Building Design and Orientation

      (1) Large multi**-unit** ~~family~~ projects shall incorporate design variation within the project to create a sense of uniqueness and individuality. Large complexes using the same building design, materials, and colors should be avoided. Design elements which achieve these objectives include: separate clustering of building groups with extensive open-space and landscape buffering between projects; variation in building elevations and configurations between projects; variation in building heights; use of different building materials or combination of different materials; contrasting color schemes between projects.

      (2) The monotony of straight building lines of all units shall be remedied through limiting the size of individual buildings or units, staggering of units, variation of exterior building materials on adjacent units, use of intensive landscaping, or other methods.

      (3) ~~Multifamily buildings adjacent to public streets shall be designed and oriented to minimize the likelihood of on-street parking by project residents.~~ Examples of acceptable design and building orientation are:

~~(a) Minimize location of main entry doors of units facing the public street.~~

(b) Break up long buildings containing many units into smaller building clusters or incorporate a breezeway through midsection of a long building which provides closer access to off-street parking area for residents.

(c) **To the extent possible,** locate off-street parking areas **to minimize visibility from** ~~between~~ the ~~public~~ street ~~and building~~ (off-street parking area to be located and screened behind bermed landscape setback area - Section B-4)

(4) All mechanical equipment (including public utility boxes and particularly exterior wall-mounted air conditioning units) shall be attractively screened.

(5) ~~Buildings shall be designed and oriented to reduce overview of private backyards and patio areas of on-site and adjacent developments and windows from second story units.~~

(6) Accessory structures shall be compatible in design and materials with main building.

(7) Communal facilities shall be centrally located, where possible.

(8) Recreational facilities shall be located and/or designed so as not to create a nuisance to surrounding units or to impact adjacent properties. Sufficient setbacks, landscaping and berming between recreation facilities and surrounding units shall be provided to minimize noise and visual conflicts.

(9) Solar heating and cooling of units shall be achieved to the maximum extent possible.

(10) Site planning shall take into account optimum solar orientation of structures.

(11) Site planning shall minimize the incidences of one building shading another.

(12) Private outdoor or garden areas shall be oriented to the south as much as possible.

(13) Roofing materials shall be compatible with architectural style and elevations.

(14) The location of second-story end unit windows shall be varied to provide variety in exterior unit detailing and designed in such a way as to reduce the incidence of overview into private first-floor open-space areas

(15) A minimum building setback ~~of 50 feet~~ shall be utilized on multiple-family projects from interior and rear property lines **where such property lines are shared with** ~~abutting~~ existing or future low-density residential developments. **For single-story structures, the minimum setback shall be 15'. For two-story structures, the minimum setback shall be 20'. For three-story structures, the minimum setback shall be 30'. For four-story structures, the minimum setback shall be 40'.** ~~(five dwelling units per acres) where two-story structures are proposed~~. ~~A minimum setback of 25 feet shall be required where single-story structures in multiple- family projects abut existing or future low-density development.~~ Low density residential development is defined as 5 dwelling units or less per acre.

(16) All units shall have private exterior areas.

(17) Maximum height 40 feet as measured from established grade prior to construction across the foundation.

(18) ~~Second-story floor area shall not exceed 90 percent of the first floor area.~~

b. Off-Street Parking Design Criteria

(1) Off-street parking shall be provided **at a ratio of 2 spaces per dwelling unit plus one space per 4 units as guest parking with a minimum of one space for the exclusive use of the occupant of each unit** ~~in accordance with the City of West Sacramento Zoning Code and in accordance with other applicable Agency requirements~~..

(2) For the convenience of tenants and guests, ~~and to encourage the use of off-street~~

~~rather than curbside parking and parking along private drives,~~ parking spaces shall be located as close as possible to the unit or communal facility it is intended to serve.

(3) ~~To discourage parking on the street and along private on-site drives, physical barriers such as landscaping, berming, or wall segments shall be incorporated into the project design.~~

(4) Off-street parking shall be screened from the street by live landscaping, undulating earthen berms, low decorative walls or any combination of the above, for the purpose of reducing glare from automobile headlights and automobiles.

(5) Surface parking areas and carport roofing shall be screened from second-story units by trees or lattice and trellis work.

(6) The setback from interior side and rear property lines shall be 10 feet for open stalls and ~~15 feet for~~ carports. If adjacent to non-residential development, the setback area shall be planted with large, growing evergreen trees to screen adjacent use.

(7) Trees shall be used for screening and shading purposes along the perimeter of the parking areas.

(8) Particularly within large, open lots, deciduous trees should be utilized to provide summer shading and winter sun.

(9) There shall be a ratio of at least one tree for every five parking spaces planted throughout or adjacent to open and covered-parking areas. Rows of parking stalls, either open or covered, shall be broken up by a tree planting approximately every 10 spaces.

(10) The parking-stall depth shall be reduced by two feet, providing that:

(a) The two feet gained shall be incorporated into adjacent landscaping, or

(b) For angled parking, the triangular space at the head of each stall shall be landscaped as a planter when abutting a sidewalk or incorporated into adjacent landscaped strips.

(11) The more efficient 90 degree parking arrangement shall be utilized when possible, so as to minimize parking lot size.

(12) For the most part, double-loading of parking aisles should be utilized to minimize surfacing devoted to maneuvering area.

c. On-Site Circulation

(1) Minimum pedestrian/vehicle conflict should be sought in driveway/walkway system design.

(2) A display and unit location map shall be installed at each major driveway entrance and any major walkway entrance to the project as an aid to emergency personnel and a convenience to visitors. An auto turnout lane shall be provided adjacent to directory map to eliminate blocking of driveway entrance.

(3) Walkway location shall assure convenient access between parking and dwelling units.

(4) Central pedestrian/bike paths shall provide convenient access to bus stops, green belts and public facilities.

(5) Pedestrian crossings shall be provided at appropriate locations along main drives and shall be accentuated by a change in surface textures.

(6) ~~Walkway connections between buildings and street sidewalks are discouraged if they encourage on-street parking by residents.~~

d. Bicycle Storage

(1) One bicycle parking facility is required for every ten (10) off-street parking spaces required, excluding developments which provide individually enclosed garages.

(2) Bicycle parking facilities may be Class I, Class II or Class III type facilities.

(3) Bicycle racks and/or lockers shall be provided throughout the development.

e. Landscaped and Open Space

(1) Landscaped materials selected shall be:

(a) Compatible with one another and with existing material on the adjacent site.

(b) Complementary to building design and architectural theme.

(c) Varied in size (one- and five-gallon shrubs, five- and 15-gallon and 24-inch box trees).

(2) Hydroseeding may be allowed provided a 90-day maintenance period is secured in the contract to ensure a healthy weed-free turf at the end of the maintenance period.

(3) Larger specimens of shrubs and trees along the site periphery, particularly along setback areas adjacent to public streets.

(4) Greater intensity of landscaping **shall be provided** at the end of buildings when those elevations lack window and door openings or other details that provide adequate visual interest. This is especially significant at the street frontage and interior side and rear property lines and for two-story structures.

(5) **Landscaping shall be** consistent with energy-conservation efforts.

(6) Trees **shall be** located so as to screen parking areas and private first-floor areas and windows from second-story units.

(7) Undulating landscaped berms **are encouraged** along street frontage.

(8) Deciduous trees shall be utilized along the south and west facing building walls to allow solar access during the winter.

(9) For crime deterrent reasons, shrubs planted below first-floor windows should be of a variety which has thorns and/or prickly leaves.

(10) Provisions for watering and maintenance facilities and/or storage shall be provided by the owner/management in the vicinity of landscaped areas.

f. Trash Enclosures

(1) The walls of the trash enclosure structure shall be constructed of solid masonry material with decorative exterior surface finish comparable to the main residential structures. Split-face concrete block finish is recommended. Brick or tile veneer exterior finish should be avoided.

(2) The trash enclosure structure shall have heavy gauge metal gates and be designed with cane bolts on the doors to secure the gates when in the open position.

(3) The trash enclosure facility shall be designed to allow walk-in access by tenants without having to open the main enclosure gates.

(4) The walls shall be a minimum of six feet in height, ~~more~~ **higher** if necessary for adequate screening.

(5) The perimeter of the trash enclosure structure shall be planted with landscaping, including a combination of shrubs and/or climbing evergreen vines.

(6) A concrete apron shall be constructed either in front of the trash enclosure facility or at point of dumpster pickup by the waste removal truck. The location, size and orientation of the concrete apron shall depend on the design capacity of the trash enclosure facility (number of trash dumpsters provided) and the direction of the waste removal truck at point of dumpster pickup. The minimum dimensions of the concrete apron for a single, two cubic-yard dumpster shall be: width 10’ or width of enclosure facility, length 20’. Larger trash enclosure facilities shall require a larger concrete apron, subject to the approval of the City ~~Public Works Department~~ **Refuse and Recycling Division**. Paving material shall consist of 5” aggregate base rock and 6” Portland cement paving.

(7) The enclosures shall be adequate in capacity, number, and distribution.

g. Signage

(1) With the exception of the main project identification sign(s), all other signage shall comply with the City Sign Ordinance or other restrictions noted herein.

(2) A project identification sign is permitted at each major entrance into the complex. The sign shall be a monument type or incorporated into a low-profile, decorative entry wall(s). The height of the monument sign shall not exceed five (5) feet. Area shall not exceed 25 square feet.

(3) The primary material of the monument base or wall shall be decorative masonry such as brick, split-face concrete block, stucco or similar material which complements the design of the main buildings.

(4) Individual letters and project logo are permitted. The signage program shall be subject to the review and approval of the Community Development Director.

(5) No sign shall be closer than ten (10) feet to any property line.

F. PD-29 RE Condominium and Apartment Use Area

1. Purpose and Intent. The PD-29 RE District is established to provide for the development and maintenance of residential neighborhoods **of** ~~which are predominantly, but not exclusively, multiple family in character for~~ condominium and apartment dwellings at up to 38 dwelling units per gross acre. Only those additional uses are permitted that are complementary to, and can exist in harmony with, a residential neighborhood. These regulations carry out the purpose and intent of the High Density Residential land-use categories of **The Rivers** ~~Lighthouse Marina~~.
2. Zoning Area. The PD-29 RE zone shall be applied **in areas shown on Exhibit "C"** ~~along or near the golf course.~~
3. Permitted, Accessory and Conditional Uses
   a. PD-29 RE Permitted Uses
      (1) **Single family and** multifamily development at up to 38 dwelling units per acre ~~with on-site recreational facilities~~.
      (2) **Park and recreational facilities.**
      (3) **School facilities.**
      (4) Ground floor retail (less than 5,000 square feet) only in a mixed use-residential building located at the intersection of Lighthouse and Douglas. Permitted uses shall include the following:
         (a) Bakery or pastry shop
         (b) Barber, beauty shop
         (c) Book, stationery store
         (d) Convenience market
         (e) Laundry/Dry Cleaning (pick up only)
         (f) Florist
         (g) Offices
         (h) Restaurant or coffee house (no drive through service)
         (i) Offices
      (5) General Provision Nos. 12 and 14, as noted in Article Two.

      (6) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

b. PD-29 RE Permitted Accessory Uses

(1) Small domestic animals.

(2) Rooming and boarding of not more than two (2) persons per unit, including household employees

(3) Signs as provided for herein

(4) Accessory uses customarily a part of the permitted use and clearly incidental and secondary to the permitted use and which do not change the character of the permitted use of affect other properties in the vicinity.

(5) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

c. PD-29 RE Conditional Uses. The following conditional uses may be allowed within the PD 29 RE sub-area upon the issuance of a conditional use permit by the Planning Commission.

(1) Neighborhood day-use areas.

(2) Public access ancillary uses.

(3) Public day-use areas.

(4) Concessionaire stands intended solely for the use or provisions of association members.

(5) Day-care centers.

(6) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

4. Site Development Standards

a. General Building Design and Orientation

(1) Large multi**-unit** ~~family~~ projects shall incorporate design variation within the project to create a sense of uniqueness and individuality. Large complexes using the same building design, materials, and colors should be avoided. Design elements which achieve these objectives include: separate clustering of building groups with extensive open-space and landscape buffering between projects; variation in building elevations and configurations between project; variation in building heights; use of different building materials or combination of different materials; contrasting color schemes between projects.

(2) The monotony of straight building lines of all units shall be remedied through limiting the size of individual buildings or units, staggering of units, variation of exterior building materials on adjacent units, use of intensive landscaping, or other methods.

(3) ~~Multifamily buildings adjacent to public streets shall be designed and oriented to minimize the likelihood of on-street parking by project residents~~. Examples of acceptable design and building orientation are:

(a) ~~Minimize location of main entry doors of units facing the public street.~~

(b) ~~Orient ends of building toward public street.~~

(c) Break up long building containing many units into smaller building clusters or incorporate a breezeway through midsection of a long building which provides closer access to off-street parking area for residents.

(d) **To the extent possible,** locate off-street parking areas **to minimize visibility from** ~~between~~ the ~~public~~ street ~~and building~~ (off-street parking area to be located and screened behind bermed landscape setback area - Section B-4).

(4) All mechanical equipment (including public utility boxes and particularly exterior wall-mounted air-conditioning units) shall be attractively screened.

(5) ~~Buildings shall be designed and oriented to reduce overview of private backyards and~~

~~patio areas of on-site and adjacent developments and windows from second-story units.~~

(6) Accessory structures shall be compatible in design and materials with main building.

(7) Communal facilities shall be centrally located, where possible.

(8) Recreational facilities shall be located and/or designed so as not to create a nuisance to surrounding units or to impact adjacent properties. Sufficient setbacks, landscaping and berming between recreation facilities and surrounding units shall be provided to minimize noise and visual conflicts.

(9) Solar heating and cooling of units shall be achieved to the maximum extent possible.

(10) Site planning shall take into account optimum solar orientation of structures.

(11) Site planning shall minimize the incidences of one building shading another.

(12) Private outdoor or garden areas shall be oriented to the south as much as possible.

(13) Roofing materials shall be compatible with architectural style and elevations.

(14) The location of second-story end unit windows shall be varied to provide variety in exterior unit detailing and designed in such a way as to reduce the incidence of overview into private first floor open space areas.

(15) A minimum building setback ~~of 50 feet~~ shall be utilized on multiple-family projects from interior and rear property lines **where such property lines are shared with** ~~abutting~~ existing or future low-density residential developments ~~where two-story structures are proposed. A minimum setback of 25 feet shall be required where single-story structures in multiple family projects abut existing or future low- density development.~~ **For single-story structures, the minimum setback shall be 15'. For 2-story structures, the minimum setback shall be 20'. For 3-story structures, the minimum setback shall be 30'. For 4-story structures, the minimum setback shall be 40'. Low density residential development is defined as 5 dwelling units or less per acre.**

(16) All units shall have private exterior areas.

(17) Maximum height thirty-two (32) feet as measured from the roof of ground-floor parking to structure eave line.

(18) ~~Second-story floor area shall not exceed ninety (90) percent of the first floor area. Third-story floor area shall not exceed eighty (80) percent of first floor area.~~

b. 0ff-Street Parking Design Criteria

(1) ~~In accordance with the City of West Sacramento Zoning Coe and in accordance with other applicable Agency requirements.~~ **Off-street parking shall be provided at a ratio of 2 spaces per dwelling unit plus one space per 4 units as guest parking with a minimum of one space for the exclusive use of the occupant of each unit.**

(2) For the convenience of tenants and guests, and to encourage the use of off-street rather than curbside parking and parking along private drives, parking spaces shall be located as close as possible to the unit or communal facility it is intended to serve.

(3) To discourage parking on the street and along private on-site drives, physical barriers such as landscaping, berming, or wall segments shall be incorporated into the project design.

(4) Off-street parking shall be screened form the street by live landscaping, undulating earthen berms, low decorative walls or any combination of the above.

(5) Surface parking areas and carport roofing shall be screened from second-story units by trees or lattice and trellis work.

(6) The setback from interior side and rear property lines shall be 10 feet for open stalls and ~~15 feet for~~ carports. If adjacent to non-residential development, the setback area

shall be planted with large, growing evergreen trees to screen adjacent use.

(7) Trees shall be used for screening and shading purposes along the perimeter of the parking areas.

(8) Particularly within large, open lots, deciduous trees should be utilized to provide sunnier shading and winter sum

(9) There shall be a ratio of at least one tree for every five parking spaces planted throughout or adjacent to open and covered parking areas. Rows of parking stalls, either open or covered, shall be broken up by a tree planting approximately every 10 spaces.

(10) The parking stall depth shall be reduced by two feet.

(a) The two feet gained shall be incorporated into adjacent landscaping.

(b) For angled parking the triangular space at the head of each stall shall be landscaped (as a planter when abutting a sidewalk or incorporated into adjacent landscaped snips).

(11) The more efficient 90-degree parking arrangements shall be utilized when possible, so as to minimize parking lot size.

(12) For the most part, double-loading of parking aisles should be utilized to minimize surfacing devoted to maneuvering area.

(13) Garden-story or ground-floor parking is preferred. Where utilized, it shall be appropriately bermed and landscaped in a manner to screen the lower fifty (50) percent of ground-floor wall.

c. On-Site Circulation

(1) Minimum pedestrian/vehicle conflict should be sought in driveway/walkway system design.

(2) A display and unit location map shall be installed at each major driveway entrance and any major walkway entrance to the project as an aid to emergency personnel and a convenience to visitors. An auto turnout lane shall be provided adjacent to directory map to eliminate blocking of driveway entrance.

(3) Walkway location shall assure convenient access between parking and dwelling units.

(4) Central pedestrian/bike paths shall provide convenient access to bus stops, greenbelts and public facilities.

(5) Pedestrian crossings shall be provided at appropriate locations along main drives and shall be accentuated by a change in surface textures.

(6) Walkway connections between buildings and street sidewalks are discouraged if they encourage on-street parking by residents.

d. Bicycle Storage

(1) One bicycle parking facility is required for every ten (10) off-street parking spaces required, excluding developments which provide individual, enclosed garages.

(2) Bicycle parking facilities may be Class I, Class II or Class III type facilities.

(3) Bicycle racks and/or lockers shall be provided throughout the development

e. Landscaped and Open Space

(1) Landscaped materials selected shall be:

(a) Compatible with one another and with existing material on the adjacent site.

(b) Complementary to building design and architectural theme.

(c) Varied in size (one- and five-gallon shrubs, five- and 15-gallon and 24-inch box trees).

(2) Lawn areas shall be established by sodding or hydromulching when conditions such as

excessive gradient, anticipated seasonal rain, etc., may result in erosion or other problems.

(3) Larger specimens of shrubs and trees along the site periphery, particularly along setback areas adjacent to public streets.

(4) Greater intensity of landscaping at the end of buildings when those elevations lack window and door openings or other details that provide adequate visual interest This is especially significant at the street frontage and interior side and rear property lines and for two-story structures.

(5) Consistency with energy conservation efforts.

(6) Trees located so as to screen parking areas and private first-floor areas and windows from second-story units.

(7) Undulating landscaped berms located along street frontage.

(8) Deciduous trees shall be utilized along the south and west facing building walls to allow solar access during the winter.

(9) For crime deterrent reasons, shrubs planted below first-floor windows should be of a variety which has thorns and/or prickly leaves.

f. Trash Enclosures

(1) The walls of the trash enclosure structure shall be constructed of solid masonry material with decorative exterior surface finish compatible to the main residential structure. Split-face concrete block finish is recommended. Brick or tile veneer exterior finish should be avoided.

(2) The trash enclosure structure shall have heavy gauge metal gates and be designed with cane bolts on the doors to secure the gates when in the open position.

(3) The trash enclosure facility shall be designed to allow walk-in access by tenants without having to open the main enclosure gates.

(4) The walls shall be a minimum of six feet in height, more if necessary for adequate screening.

(5) The perimeter of the trash enclosure structure shall be planted with landscaping, including a combination of shrubs and/or climbing evergreen vines

(6) A concrete apron shall be constructed either in front of the trash enclosure facility or at point of dumpster pickup by the waste removal truck. The location, size and orientation of the concrete apron shall depend on the design capacity of the trash enclosure facility (number of trash dumpsters provided) and the direction of the waste removal truck at point of dumpster pickup. The minimum dimensions of the concrete apron for a single, two cubic yard dumpster shall be: width 10’ or width of enclosure facility; length 20’. Larger trash enclosure facilities shall require a larger concrete apron, subject to the approval of the City ~~Public Works Department~~ **Refuse and Recycling Division**. Paving material shall consist of 5” aggregate base rock and 6” Portland cement paving.

(7) The enclosures shall be adequate in capacity, number and distribution.

g. Signage

(1) With the exception of the main project identification signs(s), all other signage shall comply with the City Sign Ordinance, or other restrictions noted herein.

(2) A project identification sign is permitted at each major entrance into the complex. The sign shall be a monument type or incorporated into a low profile decorative entry wall(s). The height of the monument sign shall not exceed five (5) feet. Areas shall not exceed twenty-five (25) square feet.

(3) The primary material of the monument base or wall shall be decorative masonry such as brick, split-fact concrete block, stucco or similar material which complements the design of the main buildings.

(4) Individual letters and project logo are permitted. The signage program shall be subject to the review and approval of the Community Development Director.

(5) No sign shall be closer than ten (10) feet to any property line.

G. PD-29 RF Tower Residential use Area

1. Purpose and Intent. The PD-29 RF District is established to provide for the development and maintenance of residential neighborhoods which are predominately, but not exclusively, multiple family in character for tower residential units at up to 62 dwelling units per gross acre. Only those additional uses are permitted that are complementary to, and can exist in harmony with a residential neighborhood. These regulations carry out the purpose and intent of the High Density Residential land use categories of the Lighthouse Marina.

2. Zoning Area. The PD-29 RF zone shall be applied ~~within reasonable proximity east and north and northwest of the marina~~ **in the areas shown on Exhibit "C"**.

3. Permitted, Accessory and Conditional Uses

   a. PD-29 RF Permitted Uses

      (1) No more than one single-family dwelling per air space division.

      (2) As noted in Article Two, General Provision Nos. 12 and 14.

      (3) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

   b. PD-29 RF Permitted Accessory Uses

      (1) Small domestic animals.

      (2) Rooming and boarding of not more than two (2) persons per unit including household employees.

      (3) Signs as provided for.

      (4) Accessory uses customarily a part of and clearly incidental and secondary to the principal permitted use of Association use and which do not change the character of the permitted use or affect other properties in the vicinity.

      (5) Attached parking structures.

      (6) On-site recreation facilities.

      (7) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

   c. PD-29 RF Conditional Uses. The following conditional uses may be allowed within the PD-29 RF sub-area upon the issuance of a conditional use permit by the Planning Commission.

      (1) Detached multi-story parking structures.

      (2) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

4. Site Development Standards

   a. General Building Design and Orientation

      (1) Large multi-story projects shall incorporate design variation within the project to create a sense of uniqueness and individuality.

      (2) The monotony of straight building lines shall be remedied through the use of staggered balconies, glass-encased sun porches, angled insets, floor-to-floor stepbacks and other architectural stylizations to enhance the visual appeal of monolithic structures.

      (3) All mechanical equipment shall be attractively screened from view not only at grade,

but to the extent possible from other adjacent multi-story structures.

(4) Accessory structures shall be compatible in design and materials with main building(s).

(5) Recreational facilities shall be located in a manner to emphasize view and retain a modest level of privacy from adjacent multi-story structures; nuisance and visual conflicts shall additionally be considered.

(6) Communal facilities shall be easily accessible and shall be designed in a manner to emphasize personal safety.

(7) Site planning shall take into account optimum solar orientation of structures. As view orientation may not coincide with the former, detailed architectural design shall consider individual unit solar orientations.

(8) Site planning shall minimize the incidences of one building shading another.

(9) Architectural compatibility with other existing large-scale structures shall be considered.

(10) Pedestrian linkages to primary recreation facilities in the surrounding area are to be encouraged.

(11) Height 50 feet, not including rooftop mechanical equipment, except as noted on Exhibit C for locations where height of 200 feet may be allowed.

b. Off-Street Parking Design Criteria

(1) All off-street parking shall be provided in accordance with Article Seven of this ordinance.

(2) For the convenience of tenants and guests, and to encourage the use of off-street rather than curbside parking and parking along private drives, parking spaces shall be located as close as possible to the unit or communal facility it is intended to serve.

(3) To discourage parking on the street and along private on-site drives, physical barriers such as landscaping, berming, or wall segments shall be incorporated into the project design.

(4) Off-street parking shall be screened from the street by live landscaping, undulating earthen berms, low decorative walls or any combination of the above.

(5) Surface parking areas and top floor parking areas of multi-story parking garages shall be screened from upper-story units by trees or lattice and trellis work or a combination of these and similar treatments. Such treatment shall cover no less than 50% of the exposed parking area.

(6) For the most part, double-loading of parking aisles should be utilized to minimize surfacing devoted to maneuvering area.

c. On-Site Circulation

(1) Minimum pedestrian/vehicle conflict should be sought in driveway/walkway system design.

(2) A display and unit location map shall be installed at each major driveway entrance and any major walkway entrance to the project as an aid to emergency personnel and a convenience to visitors.

(3) Walkway location shall assure convenient access between parking and dwelling units.

(4) Central pedestrian/bike paths shall provide convenient access to bus stops, greenbelts, and public facilities.

(5) Pedestrian crossings shall be provided at appropriate locations along main drives and shall be accentuated by a change in surface textures.

(6) Walkway connections between buildings and street sidewalks are discourage if they encourage on-street parking by residents.

d. Bicycle Storage

(1) Bicycle storage facilities shall be provided within the development in a convenient ground-floor location.

(2) One bicycle parking facility is required for every ten (10) off-street parking spaces required excluding developments which provide individually enclosed garages.

e. Landscaping and Open Space

(1) Landscape materials selected shall be:

(a) Compatible with one another and with existing material on the adjacent site.

(b) Complementary to building design and architectural theme.

(c) Varied in size (one- and five- gallon shrubs, five- and fifteen- gallon, and 24-inch box trees.

(2) Landscape treatment shall include:

(a) Lawn areas shall be established by sodding; other low ground covers as appropriate.

(b) Larger specimens of shrubs and trees along the site periphery, particularly along setback areas adjacent to public streets.

(c) Greater intensity of landscaping at the end of buildings when those elevations lack window and door openings or other details that provide adequate visual interest. This is especially significant at the street frontage and interior side and rear property lines.

(d) Consistency with energy conservation efforts.

f. Trash Enclosures

(1) The walls of the trash enclosure structure shall be constructed of solid masonry material with decorative exterior surface finish compatible to the main structures.

(2) The trash enclosure structure shall have heavy-gauge metal gates and be designed with cane bolts on the doors to secure the gates when in the open position.

(3) The trash enclosure facility shall be designed to allow walk-in access by tenants without having to open the main enclosure gates.

(4) The walls shall be a minimum of six feet in height, more if necessary for adequate screening.

(5) The perimeter of the trash enclosure structure shall be planted with landscaping, including a combination of shrubs and/or climbing evergreen vines.

(6) A concrete apron shall be constructed either in front of the trash enclosure facility or at point of dumpster pickup by the waste removal truck. The location, size and orientation of the concrete apron shall depend on the design capacity of the trash enclosure facility (number of trash dumpsters provided) and the direction of the waste removal truck at point of dumpster pickup. The minimum dimensions of the concrete apron for a single, two-cubic yard dumpster shall be: 10' or width of enclosure facility; length 20'. Larger trash enclosure facilities shall require a larger concrete apron, subject to the approval of the City ~~Public Works Department~~ **Refuse and Recycling Division.** Paving material shall consist of 5' aggregate base rock and 6" Portland cement paving.

(7) The enclosures shall be adequate in capacity, number and distribution.

g. Signage

(1) With the exception of the main project identification sign(s), all other signage shall comply with the stipulation of this text.

(2) A project identification sign is permitted at each major entrance into the complex. The sign shall be a monument type or incorporated into a low-profile decorative entry wall(s). The height of the monument sign shall not exceed five (5) feet. Area should not exceed 25 square feet.

(3) The primary material of the monument base or wall shall be decorative masonry such as brick, split-face concrete block, stucco or similar material which complements the design of the main building.

(4) Individual letters and project logo are permitted. The signage program shall be subject to the review and approval of the Community Development Director.

(5) No sign shall be closer than ten (10) feet to any property line.

(6) As allowed in Article Seven, Item G.4.

~~**ARTICLE THREE: General Provisions for Business/Professional Use Areas**~~

~~The Business/Professional Use Area is established to provide for office facilities associated with the fall service needs of the Lighthouse Marina Planned Development and the City of West Sacramento. The following provisions apply to all business/professional zoned use areas within the planned development control area.~~

~~1. Front setbacks shall be measured from the ultimate public street right of way line.~~

~~2. All construction and development within the Lighthouse Marina community shall comply with applicable provisions of the Uniform Building Code and other various Mechanical, Electrical and Commercial Construction Codes related thereto. The codes shall prevail in the business professional areas, where there is any conflict between the said codes and the provisions in this text.~~

~~3. Temporary, special community events, such as parades, pageants, community fairs, athletic contests, carnivals and other similar uses, may be permitted in any area in the Lighthouse Marina community by approval of the City Council upon application for the appropriate permit.~~

~~4. Any conditions, requirements, or standards, indicated graphically or in writing that are a part of a tentative map, use permit, variance or similar permit entitlements granted by the appropriate authority shall be in conformance with the Lighthouse Marina Planned Development Land Use Regulations. Any use or development not in conformance with such conditions, requirements, or standards shall be in violation of the Lighthouse Marina Planned Development Land Use Regulations.~~

~~5. When required by these regulations, a site development permit or use permit for a specific parcel, as appropriate, shall be submitted and approved prior to the issuance of any precise grading permit, building permit, or any change of use and occupancy permit.~~

~~6. In these land use regulations, for all land use areas when more than one description may apply to a given use, the more specific description shall determine if a use is allowed, allowed subject to an approved use permit, allowed subject to an approved site plan, or prohibited.~~

~~7. Any amendment to these land use regulations must include an amendment to other appropriate sections of the Lighthouse Marina Planned Development Land Use Regulations, where applicable.~~

~~8. At least twenty one (21) calendar days prior to official action on any application for a use permit, variance permit, or building permit, the Community Development Director will forward such application to the Lighthouse Marina Architectural Review Board for their review, recommendations and approval in accordance with Article Eight.~~

~~9. Any person, firm or corporation, whether as principal, agent, employee or otherwise, violating any provisions of these regulations shall be guilty of a misdemeanor, and upon conviction thereof shall be punishable by a fine of not more than five) hundred dollars (S500.00) or by imprisonment in the County Jail of Yolo County for a tern not exceeding six (6) months or by both such fine and~~

imprisonment. Such person, firm or corporation shall be deemed guilty of a separate offense for each and every day during any portion of which any violation of this article is committed, continued or permitted by such person, firm or corporation and shall be punishable as herein provided.

10. Applications for variances to the site development standards of these regulations shall be considered and processed in accordance with the City of West Sacramento Zoning Code.

11. The total professional office space is limited to a maximum of 200,000 square feet

12. In order to meet the purpose and intent of PD fl, mixed use structures with residential uses above parking, commercial and/or office floors is encouraged. To this end, the PD-29 BP use area may be combined with the PD-29 RE/RF and PD-29 CR/CT/CM use areas. The site development standards for the PD-29 BP, RE, RF, CT, CR, and CM use areas are intended to provide creative design flexibility for a single structure or cluster of structures. Approvals of mixed use structure(s) proposal(s) will be as outlined in Article Eight.

A. PD-29 BP Business Professional Use Area

1. Purpose and Intent. The PD-29 BP District is established to provide for conveniently situated professional offices. Only those additional uses are permitted that are complementary to and can exist in harmony with a business/professional setting.

2. Zoning Area. The PD-29 BP zone shall be applied adjacent or in reasonable proximity to the golf course.

3. Permitted, Accessory and Conditional Uses

a. PD-29 BP Permitted Uses

(1) Professional offices for:

(a) Attorneys, accountants, bookkeepers, auditors

(b) Engineers

(c) Planners

(d) Architects and Building Designers.

(e) Landscape Architects

(f) Contractors - all categories

(g) Consultants such as:

- Business consultants
- Agricultural consultants
- Building construction consultants
- Building maintenance consultants
- Chemical recycling consultants
- Computer system consultants and designers freight traffic consultants
- Geophysical companies and consultants Media consultants
- Elevator consultants

(h) Industrial designers and tool designers

(i) Geologists

(j) Arbitrators

(k) Auctioneer offices, but excluding auctioneer rooms

(l) Clothing and fashion design studios

(m) Real estate appraisers

(2) Business offices, retail sales and personal service functions in support of other businesses in the PD fl Zone and adjoining nearby commercial zones consisting of the

~~following:~~

~~(a) Advertising agencies~~

~~(b) Broadcast audience research and public opinion poll companies~~

- ~~Beeper and paging services~~
- ~~Broadcasting station (radio and TV) including sales offices and general offices~~
- ~~Broadcast audience research and public opinion poll companies~~
- ~~Cable television companies Telegraph and cablegram companies~~

~~(c) Business Services:~~

- ~~Secretarial and clerical office services~~
- ~~Telephone answering service~~
- ~~Business and office furniture and machines including sales, rentals and services~~
- ~~Background music sales and services~~
- ~~Business systems companies~~
- ~~Clipping bureaus~~
- ~~Computing services~~
- ~~Computerized billing service companies Card access and card indexing systems~~
- ~~Calculating and statistical services~~
- ~~Confidential records destruction companies Inventory service firms~~
- ~~Security patrols~~
- ~~Electronic data processing tabulating and record keeping services~~
- ~~Digital instrumentation systems, equipment and supply companies~~
- ~~Office planning services~~
- ~~Credit reporting and collection agencies~~
- ~~Pension and profit sharing plan management companies~~

~~(d) Brokerage and investments firms such as:~~

- ~~Real estate development and management firms (no sales offices)~~
- ~~Data processing time brokers~~
- ~~Food, frozen food, fruit and vegetable brokers foreign exchange brokers~~
- ~~Custom house brokers~~
- ~~Grain and meat brokers~~
- ~~Oil and land lease brokers~~
- ~~Lumber companies and brokers exclusive of product storage yard~~
- ~~Exporters and importers (no retail sales)~~
- ~~Manufacturers' sales representatives~~
- ~~Gasoline and oil marketers and distributors~~
- ~~Logging and wood chipping companies exclusive of product storage yards.~~

~~(e) Publications, graphics and reproductions such as:~~

- ~~Offices without production and warehousing~~
- ~~Printing, engraving and stationery sales and services offices without production and warehousing~~
- ~~Business, periodical and architectural Illustrators~~
- ~~Display builders and designers~~

~~Graphic designers~~

~~Drafting, blueprinting and photo-copying services~~

~~Duplicating and mimeographing services~~

~~(f) Research and development, such as:~~

~~Agricultural laboratories, including testing and analysis~~

~~Economic~~

~~Electronics research and development~~

~~Energy conservation research and development~~

~~Oil and gas exploration and development, excluding drilling for oil and gas~~

~~Patent development and marketing~~

~~Marketing analysis, research and consultation~~

~~(g) Transportation, such as:~~

~~Freight forwarding and freight consolidating companies~~

~~Freight inspection services~~

~~Courier service~~

~~Package delivery~~

~~(h) Government offices which do not provide direct public services except for those governmental agencies related to Port activities.~~

~~(i) Surveyors, such as:~~

~~Land surveyors~~

~~Marine surveyors~~

~~(j) Personal services:~~

~~Management and business organizations Trade and labor organizations~~

~~Car rental agencies without outside storage Hotel and motel reservation center — phone service only~~

~~(k) Technical and vocational schools for industrially related trades:~~

~~Industrial apprentice training schools~~

~~Computer schools~~

~~Drafting~~

~~(1) Corporate and regional headquarters.~~

~~(2) Additional office uses may be permitted if it is determined by the Planning Commission that they meet the following criteria:~~

~~(a) Professional and/or administrative offices involving no retail trade or,~~

~~(b) Professional offices limited to those services which are principally offered to business and industrial accounts, or~~

~~(c) Offices of firms which provide products or services primarily for business or industrial firms, or~~

~~(d) Firms which provide services to individuals of the community, only if those individuals are then capable of supplying services in support of the firms in the surrounding industrial firms.~~

~~(4) As noted in Article Three, General Provisions No. 12.~~

~~(5) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.~~

~~b. PD-29 BP Accessory Uses~~

(1) Attached multi-story parking structures.

(2) Outdoor day-use recreational facilities.

(3) Retail display/showroom and warehousing space up to a maximum of 10% of the gross floor area utilized by any individual tenant Floor area shall be based only on that office space under the direct control of the individual tenant

(4) Lobby and service areas for management of the structure.

(5) Outdoor newspaper vending machines.

(6) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

c. PD-29-BP Conditional Uses. The following conditional uses may be allowed within the PD-29-BP sub-area upon issuance of a Conditional Use Permit by the Planning Commission

(1) A news, food, and/or personal goods concessioner within the lobby of a permitted use.

(2) Detached multi-story parking structures.

(3) Banking service machines.

(4) Day care for children and/or the elderly.

(5) Medical/dental offices for practitioners registered by the State of California, and not intended for primary surgical and/or emergency treatment uses.

(6) Businesses and services which, by their nature, consistently utilize hazardous materials of a toxic, radioactive, or inflammable nature in the conduct of their business. Examples of such uses include film processing, x-ray labs, and chemical supply companies but do not include uses which are accessory to a permitted use, i.e., a darkroom in an architectural office, provided that these uses are compatible or made compatible with existing uses in the PD-29 Zone.

(7) Photographers and artists catering to industrial clients.

(8) Record and microfilming service.

(9) Medical, dental biological and x-ray laboratories which do not directly serve the public.

(10) Such other uses as directed by the Planning Commission to be consistent with the purpose and intent of the zoning area

4. Site Development Standards

a. Lot Requirements - no limitations

b. Building Regulations

(1) Setbacks: No improvements of any kind, and no part thereof, shall be constructed, placed, extended or permitted to remain on any site closer to a property line than herein provided.

(a) Front yard: 25' minimum. Additional setbacks equal to 2.5 feet for each additional floor of building height

(b) Side: Any combination equaling 50', with no less than 25'on any one side

(c) Rear 25'

(d) Adjacent to residential uses the appropriate yard set back must equal 10' for each floor of building height or each additional floor must step back in multiples of 10' in addition to standard setback.

(2) Setback Exceptions: The following improvements are specifically excluded from these setback provisions:

(a) Roof overhangs, provided such overhangs do not extend more than three (3) feet into any required yard.

(b) Steps, walks, and open arcades which have been specifically approved by the

Community Development Director.

(c) Paving and associated curbing, except that vehicle parking areas shall not be permitted within twenty five (25) feet of the face of curb.

(d) Fences and screen walls, except that no fence or screen wall shall be placed within the street setback area unless specifically approved by the Community Development Director.

(e) Landscaping

(f) Planters, not to exceed two (2) feet in height, three and one half (31/2) feet in overall height when planted and maximum 25 percent of public right of way frontage, which have been specifically approved by the Community Development Director.

(g) Underground improvements

(3) Lot Coverage/Building Height

(a) No building site shall be covered with a building or buildings to an extent greater than 50 percent of the area of said site, excepting that an additional 30 percent of the site area may be covered for the purpose of parking structures, covered arcades, or similar structures if approved by the Community Development Director. This exception shall not apply to covered storage areas or loading docks.

(b) Attached accessory buildings shall be considered as a part of the main building.

(c) Building width as limited by setbacks.

(d) Building height: 50' maximum, except as noted on Exhibit C for locations where height of 200 feet may be allowed.

(e) Coverage bonus percentages may be wanted at the rate of one percent of coverage for each percent of accessible outdoor public oriented space created specifically for use by the general public, such as: plazas, the building lobby, in addition to the entry to mini park or similar public benefit In no case shall coverage exceed ninety percent.

(c) Fences and Walls, Maximum Height

(1) Within front setback area such use is prohibited.

(2) Within other setback areas - the maximum height shall be six (6) feet, except that this maximum may be exceeded when higher walls are required by the~ Community Development Director for the purpose of noise mitigation or health and safety measures.

(d) Signs

(1) No billboard or advertising sign or device shall be permitted, other than the following:

(a) Those identifying the name of the business or firm occupying the premises; and

(b) Temporary signs offering the premises for sale or lease, any sign visible for more than 90 days is to be considered in violation.

(2) Signs shall conform to setback lines unless specific approval to the contrary is granted by the Community Development Director.

(3) No sign, outdoor advertising or identification on buildings or building sites shall be erected or maintained unless the size, design and locations of such signs is approved by the Community Development Director. Individual tenant signs shall not be displayed on the exterior of building.

(4) Signs which identify the name of the building shall be allowed as long as they do not project above the highest point of the building, are integral with or are attached flat against the building, or are suspended entirely beneath the canopy portion of the

~~building. Animated or moving signs and flashing or oscillating lights, except time and temperature signs, shall be prohibited. The aggregate area of such signs shall not exceed one (1) square foot for each one linear foot of building frontage.~~

~~(5) Freestanding appurtenant signs may be approved by the Community Development Director, subject to the following:~~

~~(a) Said signs shall not exceed a height of five (5) feet~~

~~(b) Not more than one freestanding sign shall be allowed for each commercial or industrial center or group of buildings that have a common parking area.~~

~~(c) Said sign shall not have a face area exceeding 25 square feet; however, only one face of a two faced sign shall be counted in computing its area.~~

~~(d) Directional signs~~

~~(e) As allowed in Article Seven, Item GA~~

~~e. Parking. All off-street parking and loading shall be provided in accordance with Article Seven.~~

~~f. Landscaping~~

~~(1) Every site on which a building shall have been placed shall be landscaped according to plans approved by the Community Development Director, which approval shall not be unreasonably withheld. Such landscaping shall cover a minimum of twenty percent of the site unless bonus percentages are offered as per 4-b-3-(e) of this article, in which case landscaped area may be 10 percent of the site.~~

~~(2) Provision for watering and other maintenance facilities shall be provided for. Maintenance for the landscaped area shall be the responsibility of the owner/management~~

~~(3) Landscaping in accordance with the approved plan shall be installed prior to the issuance of necessary occupancy permits and shall be properly maintained by the occupant thereafter.~~

~~g. Trash and Storage Areas. All storage of cartons, containers and trash shall be shielded from 'new by containment within a building or by a wall enclosure not less than six (6) feet in height and, if uncovered, not within forty (40) feet of any residential area.~~

~~h. Lighting. All on site lighting shall be designed and located so as to confine direct rays to the premises.~~

ARTICLE FOUR: General Provision for Commercial Use Areas

The commercial use areas are established to provide for a variety of facility types to allow for the diverse retail commercial needs of resident, tourist, and boater. The following provisions apply to all commercially zoned use areas within the ~~Lighthouse Marina~~ **Rivers** Planned Development control area.

1. Front setbacks shall be measured from the ultimate public street right-of-way line.

2. All construction and development within the ~~Lighthouse Marina~~ **Rivers** community shall comply with applicable provisions of the Uniform Building Code and other various Mechanical, Electrical, and Housing/Commercial Construction Codes related thereto. The codes shall prevail in commercial areas where there is any conflict between the said codes and the provisions in this text.

3. Temporary, special community events, such as parades, pageants, community fairs, athletic contests, carnivals arid other similar uses, may be permitted in any area in the ~~Lighthouse Marina~~ **Rivers** community by approval of the City Council upon application for the appropriate permit.

4. Any conditions, requirements, or standards, indicated graphically or in writing that are a part of a tentative map, use permit, variance or similar permit entitlements granted by the granted by the appropriate authority shall be in conformance with the ~~Lighthouse Marina~~ **Rivers** Planned Development Land Use Regulations. Any use or development not in conformance with such

conditions, requirements, or standards shall be in violation of the ~~Lighthouse Marina~~ **Rivers** Planned Development Land Use Regulations.

5. When required by these regulations, a site development permit or use permit for a specific parcel, as appropriate, shall be submitted and approved prior to the issuance of any precise grading permit, building permit, or any change of use and occupancy permit.

6. In these land use regulations, for all land use areas when more than one description may apply to a given use, the more specific description shall determine if a use is allowed, allowed subject to an approved use permit, allowed subject to an approved site plan, or prohibited,

7. Any amendment to these land use regulations must include an amendment to other appropriate sections of the ~~Lighthouse Marina~~ **Rivers** Planned Development Land Use Regulations.

8. At least twenty-one (21) calendar days prior to official action on any application for a use permit, variance permit, or building permit, the Community Development Director will forward such application to the ~~Lighthouse Marina Architectural~~ **Rivers Design** Review **Committee** ~~Board~~ for their review, recommendations and approval in accordance with Article Eight.

9. Any person, firm or corporation, whether as principal, agent, employee or otherwise, violating any provisions of these regulations shall be guilty of a misdemeanor, and upon conviction thereof shall be punishable by a fine of not more than five hundred dollars (5500.00) or by imprisonment in the County Jail of Yolo County for a term not exceeding six (6) months or by both such fine and imprisonment. Such person, firm or corporation shall be deemed guilty of a separate offense for each and every day during any portion of which any violation of this article is committed, continued or permitted by such person, firm or corporation and shall be punishable as herein provided.

10. Applications for variances to the site development standards of these regulations shall be considered and processed in accordance with the City of West Sacramento.

11. The total commercial space is limited to 494,000 square feet of hotel-related Commercial convention-related space, retail commercial and marine commercial uses, as well as the necessary square footage for a 500-room hotel facility.

12. In order to meet the purpose and intent of PD-29, mixed-use structures with residential uses above parking, commercial and/or office floors is encouraged. To this end, the PD-29 CT/CR/CM use areas may be combined with the PD-29 ~~BP~~/RE/RF use areas. The site development standards for the PD-29 ~~BP~~, CM, CR, CT, RE, and refuse areas are intended to provide creative design flexibility for a single structure or cluster of structures. Approvals of mixed-use structure(s) proposal(s) will be as outlined in Article Eight.

A. PD-29 CT Tourist Commercial

1. Purpose and Intent. The PD-29 CT District is established to provide for a recreationally oriented multi-use hotel, convention center and retail core facility in a high/medium/low-rise combination structure(s). Only those additional uses are permitted that are complementary to and can exist in harmony with a tourist commercial/residential facility.

2. Zoning Area. The PD-29 CT zone shall be applied ~~within reasonable proximity to the northerly end of the marina~~ **in the areas shown on Exhibit "C"**.

3. Permitted, Accessory and Conditional Uses

a. PD-29 CT Permitted Uses

(1) Tourist residential accommodations up to 500 units intended to be rented or leased by the day or week.

(2) As noted in Article Four, General Provision No. 12.

(3) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

b. PD-29 CT Accessory Uses

(1) Kitchens, kitchenettes or wet bar units in up to 10% of the tourist residential units.

(2) Public day-use recreational facilities.

(3) Parking facilities within the same structure as the permitted uses.

(4) Public lobby and sitting areas.

(5) Office, storage, and employee areas intended for the management of the permitted uses.

(6) Public-pedestrian corridors and outdoor passive-use areas.

(7) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

c. PD-29 CT Conditional Uses. The following conditional uses may be allowed within the PD-CT sub-area upon issuance of a conditional use permit by the Planning Commission.

(1) Attached or detached convention/meeting facilities up to 50,000 square feet.

(2) Attached or detached restaurant/cafeteria facilities up to six (6) establishments.

(3) Attached or detached retail commercial uses intended to principally serve inhabitants of the permitted use up to 180,000 square feet.

(4) Indoor or outdoor recreation facilities intended to principally serve the inhabitants of the permitted use or owners and employees within one-half mile of the facility.

(5) On-sale liquor establishments up to six (6) establishments.

(6) Detached multi-story parking structures.

(7) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

4. Site Development Standards

(a) Lot Requirements - no limitation

(b) Building Regulations

(1) Setbacks: No improvements of any kind and no part thereof shall be constructed, placed, extended or permitted to remain on any site closer to a property line than herein provided.

(a) Front yard: 20’

(b) Side: 20’

(c) Rear: 20’

(2) Setback Exceptions: The following improvements are specifically excluded from these setback provisions:

(a) Roof overhangs provided such overhangs do not extend more than three (3) feet into any required yard.

(b) Steps, walks, and open arcades which have been specifically approved by the Community Development Director.

(c) Paving and associated curbing, except that vehicle parking areas shall not be permitted within twenty-five (25) feet of the public street right-of-way.

(d) Fences and screen walls, except that no fence or screen wall shall be placed within the street setback area unless specifically approved by the Community Development Director.

(e) Landscaping

(f) Planters, not to exceed two (2) feet in height, three and one-half (3 1/2) feet in overall height when planted and maximum 25 percent of public right-of-way frontage, which have been specifically approved by the Community Development Director.

(g) Underground improvements

(3) Lot Coverage/Building Height

(a) No building site shall be covered with a building or buildings to an extent greater than 50 percent of the area of said site, excepting that an additional 30 percent of the site area may be covered for the purpose of parking structures, covered arcades, or similar structures if approved by the Community Development Director. This exception shall not apply to covered storage areas or loading docks.

(b) Attached accessory buildings shall be considered as a part of the main building.

(c) Building width as limited by setbacks.

(4) The space between buildings shall be sufficient to allow the passage of emergency vehicles.

(5) Building height 50 feet maximum, except as noted on Exhibit C for locations where height of 200 feet may be allowed.

(6) Coverage bonus percentages may be wanted at the rate of one percent of coverage for each percent of accessible public-oriented space created specifically for use by the general public, such as: plazas, the building lobby, in addition to the entry to mini-park or similar pubic benefit. In no case shall coverage exceed ninety percent.

c. Fences and Walls, Maximum Height

(1) Within front setback area such use is prohibited.

(2) Within other setback areas — the maximum height shall be six (6) feet, except that this maximum may be exceeded where higher walls are required by the Community Development Director for the purpose of noise mitigation or health and safety measures.

d. Signs

(1) No billboard or advertising sign or device shall be permitted, other than the following:

(a) Those identifying the name of the business or firm occupying the premises; and

(b) Temporary signs offering the premises for sale or lease; any sign visible for more than 60 days is to be considered in violation.

(2) Signs shall conform to setback lines unless specific approval to the contrary is granted by the Community Development Director.

(3) No sign or identification on buildings or building sites shall be erected or maintained unless the size, design and locations of such signs are approved by the Community Development Director.

(4) Signs which identify the name of the building shall be allowed as long as they do not project above the highest point of the building, are integral with or are attached flat against the building, or are suspended entirely beneath the canopy portion of the building. Animated or moving signs and flashing or oscillating lights, except time and temperature signs, shall be prohibited. The aggregate area of such signs shall not exceed one (1) square foot for each one linear foot of building frontage on any public street or public pedestrian promenade.

(5) Freestanding appurtenant signs may be approved by the Community Development Director, subject to the following:

(a) Signs shall not exceed a height of ten (10) feet.

(b) Not more than one freestanding sign shall be allowed for each commercial center or group of buildings that have a common parking area

(c) Said sign shall not have a face area exceeding 25 square feet; however, only one face of a two-faced sign shall be counted in computing area

(d) Directional signs

(6) As allowed in Article Seven, Item G.4.

e. Parking. All off-street parking and loading shall be provided in accordance with the City of

West Sacramento Zoning Code and other applicable Agency requirements.

f. Landscaping

(1) Every site on which a building shall have been placed shall be landscaped according to plans approved by the Community Development Director, which approval shall not be unreasonably withheld. Such landscaping shall cover a minimum of twenty percent of the site unless bonus percentages are offered as per 4-.b-(6) of this article, in which case landscaped area may be 10 percent of the site.

(2) Provision for watering and other maintenance facilities shall be provided for. Maintenance for the landscaped area shall be the responsibility of the owner/management.

(3) Landscaping in accordance with the approved plan shall be installed prior to the issuance of necessary occupancy permits and shall be properly maintained by the occupant thereafter.

g. Trash and Storage Areas. All storage of cartons, containers and trash shall be shielded from view by containment within a building or by a wall enclosure not less than six (6) feet in height and, if uncovered, not within forty (40) feet of any residential area or outdoor public area.

h. Lighting. All on-site lighting shall be designed and located so as to confine direct rays to the premises.

B. PD-29 CR Retail Commercial Use Area

1. Purpose and Intent. The PD-29 CR District is established to provide for the retail shopping needs of the ~~Lighthouse Marina~~ **Rivers** residential community and surrounding neighborhoods.
2. Zoning Area. The PD-29 CR zone shall be applied in the ~~reasonable proximity of the landward side of the manna~~ **areas shown on Exhibit "C"**.
3. Permitted, Accessory and Conditional Uses
   a. PD-29 CR Permitted Uses
      (1) Indoor retail commercial uses intended to accommodate the buying needs of the general public of the following types of articles either separately or collectively:
         (a) Apparel
         (b) Apparel accessories
         (c) Dry goods
         (d) Hardware
         (e) Art supplies
         (f) Computer hardware and software
         (g) Video and audio hardware and software
         (h) Jewelry
         (i) Timepieces
         (j) Residential furniture
         (k) Auto supplies
         (l) Residential accessories and accent items
         (m) Sporting supplies
         (n) Floral supplies
         (o) Stationery supplies
         (p) Book, card, magazine, newspaper sales
      (2) Indoor service uses of the following types intended to accommodate the personal

service needs of the general public on site, either separately or collectively:

(a) Art galleries
(b) Beauty shops/barber shops
(c) Laundry/dry cleaning services
(d) Repair services for permitted retail commercial uses
(e) Pet grooming
(f) Exercise salons
(g) Travel agencies
(h) Copying services
(i) Banking services
(j) Real estate sales offices

(3) As noted in Article Four, General Provision No. 12.

(4) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

b. PD-29 CR Accessory Uses

(1) Indoor public space.

(2) Outdoor passive recreation areas.

(3) Signs in accordance with PD-29 CR Zone Standards.

(4) Attached multi-story parking structure.

(5) Office and warehousing space in support of the permitted retail commercial use tenant, not to exceed 25% of the gross floor area utilized by any individual tenant. Floor area shall be based only on that retail space under the direct control of the individual tenant.

(6) Office and service areas for the management of a structure.

(7) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

c. PD-29 CR Conditional Uses. The following conditional uses may be allowed within the PD-29 CR sub-area upon issuance of a Conditional Use Permit by the Planning Commission:

(1) Sit-down restaurants and cafes.

(2) Fast-food restaurants.

(3) Delicatessens.

(4) Specialty food stores.

(5) Grocery stores.

(6) On-sale liquor establishments.

(7) Off-sale liquor establishments.

(8) Entertainment arcades.

(9) Live or movie theaters.

(10) Retail convenience stores.

(11) Discount retail commercial establishments.

(12) Business and services which by their nature consistently utilize hazardous materials of a toxic, radioactive, or inflammable nature in the conduct of their business or service.

(13) Gas Station

(14) Uses operating between the hours of 2 a.m. to 7 a.m.

(15) Such other uses as deemed by the Planning Commission to be consistent with the

purpose and intent of the zoning area.

4. Site Development Standards
   a. Lot Requirements - no limitation
   b. Building Regulations
      (1) Setbacks: No improvements of any kind and no part thereof shall be constructed, placed, extended or permitted to remain on any site closer to a property line than herein provided.
         (a) Front Yard: 20
         (b) Side: 20’
         (c) Rear: 20’
         (d) Between structures: 20’
      (2) Setback Exceptions: The following improvements are specifically excluded from these setback provisions:
         (a) Roof overhangs, provided such overhangs do not extend more than three (3) feet into any required yard.
         (b) Steps, walks, and open arcades which have been specifically approved by the Community Development Director.
         (c) Paving and associated curbing, except that vehicle parking areas shall not be permitted within fifteen (15) feet of public right-of-way.
         (d) Fences and screen walls, except that no fence or screen wall shall be placed within the street setback area unless specifically approved by the Community Development Director.
         (e) Landscaping.
         (f) Planters, not to exceed two (2) feet in height, three and one-half (3 1/2) feet in overall height when planted and maximum 25 percent of public right-of-way frontage, which have been specifically approved by the Community Development Director.
         (g) Underground improvements.
      (3) Lot Coverage/Building Height
         (a) No building site shall be covered with a building or buildings to an extent greater than 50 percent of the area of said site, excepting that an additional 30 percent of the site area may be covered with carports, open arcades, or similar structures if approved by the Community Development Director. This exception shall not apply to covered storage areas.
         (b) Attached accessory buildings shall be considered as a part of the main building.
         (c) Building with as limited by setbacks.
         (d) Building height: 50’, maximum
         (e) Coverage bonus percentage may be granted at the rate of one percent of coverage for each percent of accessible public space created for use by the general public.
   c. Fences and Walls, Maximum Height
      (1) Within front setback area - three and one-half (3 1/2) feet maximum.
      (2) Within other set back areas - the maximum height shall be six (6) feet, except that this maximum may be exceeded when higher walls are required by the Community Development Director for the purpose of noise mitigation or health and safety measures.
   d. Sign. Signs shall be allowed in accordance with Article Four Section A.4.d.
   e. Parking

All off-street parking and loading shall be provided in accordance with Article Seven.

f. Landscaping

(1) Every site on which a building shall have been placed shall be landscaped according to plans approved by the Community Development Director, which approval shall not be unreasonably withheld. Such landscaping shall cover a minimum of twenty percent of the she unless bonus percentages are offered as per 4-b-3-e of this article, in which case landscaped area may be 10 percent of the she.

(2) Provision for watering and other maintenance facilities shall be provided for. Maintenance for the landscaped area shall be the responsibility of the owner/management

(3) Landscaping in accordance with the approved plan shall be installed prior to the issuance of necessary occupancy permit and shall be properly maintained by the occupant thereafter.

g. Trash and Storage Areas. All storage of cartons, containers and trash shall be shielded from view by containment within a building or by a wall enclosure not less than six (6) feet in height and, if uncovered, not within forty (40) feet of any residential area or outdoor public area.

h. Lighting. All on-site lighting shall be designed and located so as to confine direct rays to the premises.

C. PD-29 CM Marine Commercial Use Area

1. Purpose and Intent. The PD-29 CM District is established to provide facilities to meet the marine-oriented retail needs of both resident and visiting boating
2. Zoning Area. The PD-29 CM zone shall be applied ~~within reasonable proximity to the south and west edges of the marina~~ **in the areas shown on Exhibit "C"**.
3. Permitted, Accessory and Conditional Uses

a. PD-29 CM Principal Permitted Uses

(1) The operation of a ship's chandlery, including the sale and supply of all items normally provided in a ship's chandlery.

(2) Bait and tackle shop

(3) Boat sales and rentals with necessary dockage space.

(4) Merchandising and service establishment such as a coffee shop, carry-out beverage/food facilities, and snack bar.

(5) The maintenance and operation of a boat and boat supply sales

(6) The maintenance and operation of a complete fueling facility for pleasure boats both afloat and on trailers.

(7) Harbor master office and accompanying residential unit.

(8) Harbor security office, sheriffs' land and water patrol office.

(9) As noted in Article Four, General Provision No. 12.

(10) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

b. PD-29 CM Permitted Accessory Uses

(1) The operation of a boat launching ramp.

(2) A sports-fishing, charter boat concession with necessary office, ticketing and dockage space.

(3) The maintenance and operation of a boat repair shop limited to the alteration, maintenance and repair of the rigging, sails engines and accessories of small craft.

(4) Facilities to accommodate various other merchandising or service businesses for

sportsmen, retail provisioning, in conjunction with other merchandising or service businesses for sportsmen; skin diving sales and services.

(5) Bait receivers.

(6) Automobile parking, restroom and shower facilities for boat owners.

(7) The maintenance and operation of a boat and boat supply sales facility.

(8) Public room or rooms for meetings, conferences, etc.

(9) Restaurant and cocktail lounges.

(10) Boat Clubs.

(11) Boat Brokerage.

(12) Maxine Insurance.

(13) Signs in accordance with PD-29 CM Zone Standards.

(14) Public day-use area

(15) Public access ancillary uses.

(16) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

c. PD-29 CM Conditional Uses

Such uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

4. Site Development Standards

a. Lot Requirements - no limitation

b. Building Regulations

(1) Setbacks: No improvements of any kind, and no part thereof, shall be constructed, placed, extended or permitted to remain on any site closer to a property line than herein provided.

(a) Front Yard: 20’

(b) Side: 20’

(c) Rear: 20’

(d) Between structures: 20’

(2) Setback Exceptions: The following improvements are specifically excluded from these setback provisions:

(a) Roof overhangs, provided such overhangs do not extend more than three (3) feet into any required yard.

(b) Steps, walks, and open arcades which have been specifically approved by the Community Development Director.

(c) Paving and associated curbing, except that vehicle parking areas shall not be permitted within fifteen (15) feet of public right-of-way.

(d) Fences and screen walls, except that no fence or screen wall shall be placed within the street setback area unless specifically approved by the Community Development Director.

(e) Landscaping.

(f) Planters, not to exceed two (2) feet in height, three and one-half (3 1/2) feet in overall height when planted and maximum 25 percent of public right-of-way frontage, which have been specifically approved by the Community Development Director.

(g) Underground improvements.

(3) Lot Coverage/Building Height

(a) No building site shall be covered with a building or buildings to an extent greater than 50 percent of the area of said site, excepting that an additional 30 percent of the site area may be covered with carports, open arcades, or similar structures if approved by the Community Development Director. This exception shall not apply to covered storage areas.

(b) Attached accessory buildings shall be considered as a part of the main building.

(c) Building width as limited by setbacks.

(d) Building height: 50', maximum.

(e) Coverage bonus percentage may be granted at the rate of one percent of coverage for each percent of accessible public space created for use by the general public.

c. Fences and Walls, Maximum Height

(1) Within front setback area - three and one-half (3 1/2) feet maximum.

(2) Within other setback areas - the maximum height shall be six (6) feet, except that this maximum may be exceeded when higher walls are required by the Community Development Director for the purpose of noise mitigation or health and safety measures.

d. Signs. Signs shall be allowed in accordance with Article Four Section A.4.d.

e. Parking. All off-street parking and loading shall be provided in accordance with Article Seven.

f. Landscaping

(1) Every site on which a building shall have been placed shall be landscaped according to plans approved by the Community Development Director, which approval shall not be unreasonably withheld. Such landscaping shall cover a minimum of twenty percent of the site unless bonus percentages are offered as per 4-b-3-e of this article, in which case landscaped area may be 10 percent of the site.

(2) Provision for watering and other maintenance facilities shall be provided for. Maintenance for the landscaped area shall be the responsibility of the owner/management

(3) Landscaping in accordance with the approved plan shall be installed prior to the issuance of necessary occupancy permits and shall be properly maintained by the occupant thereafter.

g. Trash and Storage Areas. All storage of cartons, containers and trash shall be shielded from view by containment within a building or by a wall enclosure not less than six (6) feet in height and, if uncovered, not within forty (40) feet of any residential area or outdoor public area.

h. Lighting. All on-site lighting shall be designed and located so as to confine direct rays to the premises.

ARTICLE FIVE: General Provisions for Recreational Use Areas

A variety of recreational areas have been established in the ~~Lighthouse Marina~~ **Rivers** Planned Development for the purpose of providing diversity in the recreational opportunities available. The following provisions apply to all recreationally zoned use areas:

1. Front setbacks shall be measured from the ultimate public street right-of-way line.
2. All construction and development within the ~~Lighthouse Marina~~ **Rivers** community shall comply with applicable provisions of the Uniform Building Code and other various Mechanical, Electrical, and Housing Codes related thereto. The codes shall prevail where there is any conflict between the said codes and the provisions in this ten
3. Temporary, special community events, such as parades, pageants, community fairs, athletic contests, carnivals and other similar uses, may be permitted in any area in the ~~Lighthouse~~

~~Marina~~ **Rivers** community by approval of the City Council upon application for the appropriate permit.

4. Any conditions, requirements, or standards, indicated graphically or in writing that are a part of a tentative map, use permit, variance or similar permit entitlements granted by the wanted by the appropriate authority shall be in conformance with the ~~Lighthouse Marina~~ **Rivers** Planned Development Land Use Regulations. Any use or development not in conformance with such conditions, requirements, or standards shall be in violation of the ~~Lighthouse Marina~~ **Rivers** Planned Development Land Use Regulations.
5. When required by these regulations, a site development permit or use permit for a specific parcel, as appropriate, shall be submitted and approved prior to the issuance of any precise grading permit, building permit, or any change of use and occupancy permit.
6. In these land use regulations, for all land use areas when more than one description may apply to a given use, the more specific description shall determine if a use is allowed, allowed subject to an approved use permit, allowed subject to an approved site plan, or prohibited.
7. Any amendment to these land use regulations must include an amendment to other appropriate sections of the ~~Lighthouse Marina~~ **Rivers** Planned Development Land Use Regulations.
8. At least twenty-one (21) calendar days prior to official action on any application for a use permit, variance permit, or building permit, the Community Development Director will forward such application to the ~~Lighthouse Marina Architectural~~ **Rivers Design** Review **Committee** ~~Board~~ for their review, recommendations and approval in accordance with Article Eight.
9. Any person, firm or corporation, whether as principal, agent, employee or otherwise, violating any provisions of these regulations shall be guilty of a misdemeanor, and upon conviction thereof shall be punishable by a fine of not more than five hundred dollars ($500.00) or by imprisonment in the County Jail of Yolo County for a term not exceeding six (6) months or by both such fine and imprisonment. Such person, firm or corporation shall be deemed guilty of a separate offense for each and every day during any portion of which any violation of this article is committed, continued or permitted by such person, firm or corporation and shall be punishable as herein provided.
10. Applications for variances to the site development standards of these regulations shall be considered and processed in accordance with the City of West Sacramento Zoning Code.

A. PD-29 RMH Recreational Marina/Harbor Use Area

1. Purpose and Intent. The PD-29 RMH District is established for the establishment, improvement and conduct of a marina/harbor and for the development of all marina support RMH services and facilities necessary or convenient for the promotion and accommodation of commerce, navigation and public use. Only those additional uses are permitted that are complementary to, and can exist in harmony with, a marina/harbor.
2. Zoning Area. The PD-29 RHM zone shall be ~~executed within reasonable proximity to the southeast portion of the PD-29 zone to the east of the existing levee~~ **applied in the areas shown on Exhibit "C"**.
3. Permitted, Accessory and Conditional Uses
   a. PD-29 RMH Principal Permitted Uses
      (1) Boat slips and docking facilities
      (2) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.
   b. PD-29 RMH Permitted Accessory Uses
      (1) Marine fueling facility.
      (2) Boat launching facility.
      (3) Convenience docking.

(4) Transient boat berthing.

(5) Harbor Patrol dock.

(6) Sport fishing/charter tour boat landing ticketing office.

(7) Fish weighing station.

(8) Boat storage facilities, pier, anchorages, aids to navigation and public utilities.

(9) Marina waste water pump-out facility.

(10) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

c. PD-29 RMH Conditional Uses. Such uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

4. Site Development Standards

a. Building site area - no limitation

b. Building site width - no limitation

C. Covered boat storage height - Eighteen (18) feet above the 100-year flood elevation maximum permitted as measured at average mean low water level, unless otherwise provided for by an approved site development permit or use permit.

d. Walls and fences as conditionally approved in order to meet public safety and the criteria of this ordinance.

e. Trash and Storage Areas - All storage cartons and trash shall be shielded from view by containment within a building or within an area enclosed by a wall not less than 6 feet in height and, if covered, not within 40 feet of any residential area.

f. Construction of seawalls and similar protective devices within the marina shall only be permitted when required to serve river-dependent uses or to protect existing structures or public areas in danger from erosion and when designed to mitigate adverse impacts on local river edge lines.

g. Adequate provisions for safe public access shall be required for each development permit along the shoreline of or within the marina. The amount of access required will be commensurate with the size and type of development

h. Use of boats as permanent residences shall be limited to a maximum of 10 percent of total available slips. Houseboats shall be prohibited.

i. Use of boats as temporary residences, not to exceed three (3) days, shall not be subject to the restrictions in “i” above.

j. A marina walkway will be provided and integrated with future uses.

k. All on-site lighting shall be designed and located so as to confine direct rays to the premises.

B. PD-29 RGC Recreational Golf Course Use Area

1. Purpose and Intent. The PD-29 RGC District is established for the development of a golf course and all golf-related services and facilities for an 18-hole golf course and associated accessory uses.

2. Zoning and Area. The PD-29 RGC zone shall be executed in the ~~vicinity of the existing Riverbend Golf Course~~ **areas as shown on Exhibit “C”**.

3. Permitted, Accessory and Conditional Uses

a.PD-29 RGC Principal Permitted Uses

(1) 18-hole golf course

(2) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

b. PD-29 RGC Permitted Accessory Uses

(1) Golf Pro-Shop

(2) Coffee shop/restaurant/bar

(3) Driving range

(4) Putting green

(5) Vehicular parking

(6) Golf-cart storage and rental

(7) Maintenance yard

(8) Administrative Offices

(9) Related recreational uses, including swimming and racquet sports.

(10) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

c. PD-29 RGC Conditional Uses

Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

4. Site Development Standards

a. Building site area - no limitation

b. Building site width - no limitation

c. Building height - Thirty-one (31) feet maximum permitted unless otherwise provided for by an approved site development permit or use permit.

d. Building site coverage - minimal necessary to provide for accessory uses.

e. Building setbacks - All buildings, structures, and parking facilities shall be set back a minimum often (10) feet from all property lines and any public or private street, unless otherwise provided for by an approved site development permit or use permit.

f. All off-street parking and loading shall be provided in accordance with the City of West Sacramento Zoning Code and other applicable Agency requirements.

g. Walls and fences required for safety, security, and aesthetic purposes.

h. Landscaping - As may be required by the conditions of approval for a site development permit or use permit.

i. Trash and Storage Areas - All storage cartons and trash shall be shielded from view by containment within a building or within an area enclosed by a wall not less than 6 feet in height and, if towered, not within 40 feet of any residential area.

j. Signs - as allowed in Article Seven, Item G.4.

C. PD-29 OS Open Space Use Area

1. Purpose and Intent. The OS District is established to provide for uses which serve the outdoor recreational and educational needs of the ~~Lighthouse Marina~~ **Rivers** neighborhood and surrounding community while protecting resources of notable scenic, natural, geological, or historical value. It is intended that any building structure or other constructed element permitted in this district shall be subordinate to that purpose and intent. A minimum of 27.9 acres + shall be allowed for public open space use.

2. Zoning Area. The PD-29 OS zone shall be implemented in the form of:

a. A linear open space extending the length of the extension of River Bank Road at the south edge of the levee, with the approval of the competent authorities **as shown on Exhibit "C"**.

b. A scenic riverfront overlook directly across from the County of Sacramento's Discovery Park, providing both visual and physical access to the Sacramento River, and

c. A continuous pedestrian corridor at the edge of or near the Sacramento River.

d. The preservation, enhancement and protection of existing riparian forest along the edge of the Sacramento River.

3. Permitted, Accessory and Conditional Uses

a. Principal Uses Permitted. Any of the following uses are allowed except as provided in other subsections herein

(1) Parks and playgrounds/pedestrian and bicycle

(2) Trails

(3) Buffer greenbelts

(4) Archaeological sites

(5) River access, public only

(6) Historical or botanical preserves

(7) Horticultural experimentation/arboretum

(8) Scenic overlooks

(9) Such other uses as deemed by the Planning Commission to be consistent with the purpose and intent of the zoning area.

b. Conditional Uses

(1) Any use which the Planning Commission finds consistent with the purpose and intent of the OS District of the Lighthouse Marina Planned Development Concept Plan.

(2) Outdoor commercial recreation

(3) Utility and government uses

(4) Day-use facilities

(5) Seasonal river-oriented commercial activities that further enhance the public experience of the river.

(6) Park concessionaires.

c. Prohibited Uses. The following uses are specifically prohibited in this area, except as provided in other subsections herein:

(1) All uses not listed as allowed under a. or b.

(2) Any use that restricts or limits public access, unless provided for by an approved use permit.

(3) Signs not provided for by an approved use permit or site development permit.

(4) Any use inconsistent with the goals and intentions of Open Space and which would intrude on the execution of such goals and intentions.

4. Site Development Standards

a. Building site area - no limitation

b. Building site width - no limitation

c. Building height - one-story above 100-year floodplain

d. Building site coverage - shall be minimal amount necessary to shield and protect park concessionaires.

e. Building setbacks - All buildings, structures, and parking facilities shall be set back a minimum of ten (10) feet from all property lines and any public or private street, unless otherwise provided for by an approved site development permit or use permit.

f. Off-street parking per City of West Sacramento Zoning Code.

g. Walls and fences shall not be placed where obstruction to high water flows would occur.

h. Landscaping - As may be required by the conditions of approval for a site development

permit or use permit.

i. Trash and Storage Areas - All storage canons and trash shall be shielded from view by containment within a building or within an area enclosed by a wall not less than 6 feet in height and, if covered, not within 40 feet of any residential area.

j. Construction of seawalls and similar protective devices shall only be permitted when required to serve river-dependent uses or to protect existing structures or public areas in danger from erosion and when designed to mitigate adverse impacts on local river edge lines.

k. Adequate provisions for safe public access shall be required for each development permit along the shoreline of or within the marina. The amount of access required will be commensurate with the size and type of development

l. A riverfront walkway will be provided, and integrated with future uses.

m. All on-site lighting shall be designed and located so as to confine direct rays to the PD-29 OS Zone.

n. Signs - as allowed in Article Seven, Item G.4.

ARTICLE SIX: General Provisions for Overlay Districts

The overlay district is established to provide additional regulations to the established "base" zone. The intent of the overlay districts is to:

a. Preserve and enhance certain valuable physiographic characteristics;

b. Insure the public safety, health and welfare; and

c. Encourage the desired and intended level of physical design.

A. PD-29 FP Floodplain District

1. Purpose and Intent. The PD-29 FP District is established to provide additional land use regulations to other established districts in the ~~Lighthouse Marina~~ **Rivers** Community with which it is combined or overlaid. These regulations are intended to prevent loss of life and property caused by floods and to satisfy criteria promulgated by the Federal Insurance Administration for providing flood insurance eligibility to property owners.
2. Overlay Zone Area – All property identified as being in Flood Zone A in FEMA Maps.
3. Permitted, Accessory, Conditional and Prohibited Uses as per "base" zone.
4. Site Development Standards
   a. As per "base" zone.
   b. As described and enumerated in City of West Sacramento Zoning Code for same such zone.
   c. As limited by State and Federal Codes and Regulations.

B. PD-29 FLP Flood Protection Levee Overlay Zone

1. Purpose and Intent. The PD-29 FLP District is established to provide additional land use regulations to other established districts in the ~~Lighthouse Marina~~ **Rivers** community with which it is combined or overlaid. These regulations are intended to prevent loss of life and property caused by floods.
2. Overlay Zone District Boundary. To be determined by final location of all levee and/or flood wall, levee combination areas.
3. PD-29 FLP Permitted, Accessory Conditional and Prohibited Uses - As per "base" zone
4. Site Development Standards
   a. As per "base" zone
   b. As limited by State and Federal Codes and Regulations

ARTICLE SEVEN: Special Regulations

~~Lighthouse Marina~~ **The Rivers** is being created as a planned unit development composed of a variety of land uses intended to provide an interrelated total environment, utilizing a common theme, while encouraging architectural variation.

These development regulations are established for the purpose of achieving a goal of commonalty in detailed development plans for the project area. The duties and responsibilities of the ~~Lighthouse Marina~~ **Rivers Design** ~~Architectural~~ Review ~~Board~~ **Committee** are defined in the ~~Covenants, Codes and Restrictions~~ **Community Charter** which ~~are~~ **is** to be recorded for the L~~ighthouse Marina~~ **Rivers** Planned Development.

The ~~Architectural~~ **Design** Review **Committee** ~~Board~~ as well as all governing jurisdictions shall adhere to the following general objectives in reviewing development plans for the ~~Lighthouse Marina~~ **Rivers**.

1. To provide adequate natural light, pure air and safety from fire and other dangers.
2. To enhance the value of land and structures within ~~Lighthouse Marina~~ **the Rivers**.
3. To minimize congestion due to vehicular and pedestrian circulation within the project area.
4. To preserve and enhance the aesthetic values throughout ~~Lighthouse Marina~~ **the Rivers**.
5. To promote public health, safety, comfort, convenience and general welfare.

These objectives are intended as a supplement to existing City Ordinances and the ~~Covenants, Codes and Restrictions~~ **Community Charter** to achieve the desired development goals. Amendments to these development guidelines can be adopted by the City of West Sacramento Planning Commission, in conjunction with the ~~Lighthouse Marina~~ **Rivers Design** ~~Architectural~~ Review ~~Board~~ **Committee**.

A. General

All the elements of ~~Lighthouse Marina~~ **the Rivers** shall be designed to create a desirable environment. Each element shall have a defined internal relationship and be in architectural harmony with other surrounding areas. Living ground cover with permanent irrigation interspersed with tree planting, walkways, rest areas and service facilities will tie together the individual elements throughout the project. Consideration shall be given to preserving existing trees and desirable topographic features.

It shall be the intention of the Community Development Director to achieve the goal, as envisioned for ~~Lighthouse Marina~~ **the Rivers**, by encouraging design which will emphasize harmonious relationships between man and his environment.

B. Landscaping

A plan for landscaping and pedestrian circulation shall be established to insure continuity in design and landscaping patterns. The species, size and spacing of trees and other planting materials shall conform to the approved planting list, which encourages species required minimal irrigation and fertilization. All landscaping referred to in this section shall be maintained in a neat and orderly fashion.

1. Front-Yard Setback Area: Landscaping in these areas shall consist of an effective combination of trees, ground cover and shrubbery.

2. Side and Rear-Yard Setback Area: All unpaved areas not utilized for planting and storage shall be landscaped utilizing live plant material consisting of ground cover and/or shrubbery and tree material. Undeveloped areas proposed for future expansion development shall be maintained in a weed-free condition but need not be landscaped. Boundary landscaping is required on all interior property lines. Said areas shall be placed along the entire breadth of these property lines or be of

sufficient length to accommodate the number of required trees. Trees, equal in number to one (1) tree per twenty-five (25) linear feet of each property line, shall be planted in the above-defined areas in addition to required ground cover and shrub material.

3. Parking Areas: Trees, equal in number to one (1) per each five (5) parking spaces, or equivalent landscaping, shall be provided in the at-grade planting area.

4. **Trees: Any regulated activity affecting Street Trees, Landmark Trees and Heritage Trees as such terms are defined in the City's Tree Ordinance shall be done in compliance with the Tree Ordinance.**

~~Trees: As used in this section, a "tree" shall mean any living native oak tree having at least one trunk of six inches or more in diameter, measured four and one-half (4 ½) feet above the ground or a multi-trunk native oak tree having an aggregate diameter of ten inches or more, measured four and one-half (4 ½) feet above the ground (dbh). It is recognized that the preservation of trees enhances the natural scenic beauty, sustains the long-term potential increase in property values, which encourages quality environment; maintains the original ecology; retains the original tempering effect of extreme temperatures; increases the attractiveness of the City to visitors; helps to reduce soil erosion; and increases the oxygen output of the area, which is needed to combat air pollution. No person shall trench, grade or fill within the dripline of any tree of destroy, kill or remove any tree unless the appropriate application has been made as defined below. Exemptions from the provisions of this restriction include:~~

(1) ~~Trees identified on an approved grading permit issued by the Director of Public Works.~~

~~(2) Trees shown for removal on an approved site plan where construction cannot take place without the removal of the tree.~~

~~(3) Emergency situation for safety reasons.~~

~~(4) Public agency directed work within R.O.W.'s, parks, and open space areas.~~

~~(5) Other instances in accordance with any adopted Tree Ordinance.~~

~~The preservation or removal of trees as a condition of approval of a discretionary project shall be the sole and continuing responsibility of a the approving body which granted approval of the project. Any person desiring to cut down, destroy or remove one or more trees shall make application to the City Manager or his designee not less than ten days prior to the time desired to physically remove the tree. Said application shall contain:~~

~~a. A brief statement of the reasons for removal;~~

~~b. Consent of the owner or record of the land on which the proposed activity is to occur;~~

~~c. A tree survey with the accurate location, number, species, size diameter measured 4 ½ feet above the ground, approximate heights and approximate canopy diameter and approximate age (if known) of the tree or trees to be removed;~~

~~d. If the project involves other discretionary development, then this survey must be part of the total development plan and must also describe any tree or trees which could be affected by the proposed development; and~~

~~e. Any other pertinent information requested.~~

~~f. The approving body may mandate any or all of the following control measures to mitigate damage to oak trees caused by land development;~~

~~(1) No grade cuts greater than one foot shall occur within the driplines of oak trees, and no grade cuts whatsoever shall occur within five feet of their trunks;~~

~~(2) No fill greater than one foot shall be placed within the driplines of oak trees and no fill whatsoever shall be placed within five feet of their trunks;~~

~~(3) No trenching whatsoever shall be allowed within the driplines of oak trees. If it is absolutely necessary to install underground utilities within the driplines of an oak tree, the trench shall be authorized by the Director of Public Works.~~

~~(4) No irrigation system shall be installed within the driplines of oak tree(s) which may be detrimental to the preservation of the oak tree(s) unless specifically authorized by the Director of Public Works.~~

~~(5) Landscaping beneath oak trees may include non-plant materials such as boulders, cobbles, wood chips, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation.~~

~~(6) Major roots two inches or greater in diameter encountered within the tree's dripline in the course of excavation from beneath trees which are not to be removed shall not be cut and shall be kept moist and covered with earth as soon as possible. Roots one inch to two inches in diameter which are severed shall be trimmed and treated with pruning compound and covered with earth as soon as possible.~~

(7) ~~Support roots that are inside the dripline of the tree shall be protected. The permitted is required to hand dig in the vicinity of major trees to prevent root cutting and mangling which may be caused by heavy equipment.~~

C. Pedestrian Circulation

The schematic plan set forth in "B" of this Article shall include a system of pedestrian and bicycle ways. Plans for the development of each parcel shall include a walkway system as indicated on the schematic plan or on an approved amendment to such schematic plan. An exhibit shall be approved and included in this schematic plan that indicates the typical treatment of walkway system design if it is to be located in the setback area adjacent to a public street. An exhibit shall be approved and included within this document that indicates typical design requirements for walkway materials, planting, shade structures, benches, light standards, and other elements of the walkway system. Planting shall conform to an approved planting list, which shall also be approved and included within this document.

D. Parking Area Standards

Adequate off-street parking shall be provided to accommodate all parking needs of the site. The intent is to eliminate the need for any on-street parking. Parking requirements as follows or as per City of West Sacramento Zoning Code for uses not specified hereunder.

Required off-street parking shall be provided on the site of the use served, or on a contiguous site. Where parking is provided on other than the site concerned, a recorded document shall be approved by the City Attorney and filed with the Community Development Department and signed by the owners of the alternate site stipulating to the permanent reservation of use of the site for said parking.

The following guide shall be used to determine parking requirements:

1. Office: One (1) space for each 250 square feet of gross floor area.
2. Restaurants, Cafes, and Bars: One (1) space for each 100 square feet of bar area, 1 space for each 300 square feet of food preparation area, and 1 space for each 100 square feet of seating/serving area.
3. Commercial: One (1) space for each two hundred (200) square feet of gross floor area. One (1) loading space for each ten thousand (10,000) square feet of gross floor area.
4. Hotels: One (I) space for each guest room.
5. ~~Multiple~~ Residential: ~~In accordance with zone requirements~~ **As described in each residential land use area of PD-29**.
6. Curbs, walls, decorative fences with effective landscaping or similar barrier devices shall be located along the perimeter of parking lots, garages, and storage areas, except at entrances and exits indicated on approved parking plans. Such barriers shall be so designated and located to

prevent parked vehicles from extending beyond property lines of parking lots and garages or into yard spaces where parking is prohibited and to protect drainages from parking lots.

7. Curbs and drives shall be constructed in accordance with the current requirements of the City of West Sacramento.
8. Shared parking may be approved where the applicant demonstrates that multiple uses will reduce the actual amount of parking needed.

D. Exterior Lighting

1. Fixture types used shall be compatible and harmonious throughout the entire development and should be in keeping with their specific function and the building types they serve. Fixture type in landscape or walkway areas shall utilize anodized aluminum standards with various mounting heights.
2. Lighting shall be designed in such a manner as to provide safety and comfort for occupants of the development and the general public.
3. Lighting design shall be such as not to produce hazardous and annoying glare to motorists and building occupants or the general public. Indirect lighting is recommended.
4. Recommended maintained illuminances for commercial parking areas shall be 2.0 average foot candles and 0.7 minimum foot candles and for multifamily residential parking areas shall be 1.5 average foot candles and .5 minimum foot candles.
5. All on-site lighting shall be designed and located so as to minimize light trespass to the adjacent premises.

E. Building Standards

1. Exterior Wall Materials
    a. The purpose and intent of this section is to encourage, not restrict, the creative and innovative use of materials and methods of construction and to prevent indiscriminate and insensitive use of materials and design.
    b. Finish building materials shall be applied to all sides of a building which are visible to the general public and occupants of the same and other buildings.
    c. Concrete block exposed to the exterior shall not be acceptable to any purpose or use.
    d. The effect of a material used on a building shall be considered in relationship to all other buildings in the development and shall be compatible with otter buildings.
2. Colors. All colors shall be harmonious and compatible with colors of other buildings in the development and the natural surroundings.
3. Roof Projections
    a. Large items such as air conditioning, ventilating, other mechanical equipment shall be screened or enclosed in such manner as to hide such equipment.
    b. Projections shall be painted to match roof or building.
4. Garbage, Loading Dock, and Other Services Screening
    a. These elements shall be so located as to cause no nuisance to the general public, occupants of the same and other buildings.
    b. They shall be located in the most inconspicuous mariner possible.
    c. All garbage and refuse shall, if not contained and concealed within the building, be concealed by means of a screening wall of a material similar to and compatible with that of the building.
    d. These facilities shall be integral with the concept of the building planning and in no way attract attention because of their unplanned character.
5. Mechanical Equipment

a. All mechanical equipment, utility meters and storage tanks shall be located in such a manner so as not to be visible to the general public.
b. If concealment within the building is not possible, then such utility elements shall be concealed by screen.
c. Penthouses and mechanical equipment screening shall be of a design and materials similar to and compatible with those used in the related buildings. These structures may exceed the maximum height limit.
d. Underground utility lines throughout the project shall be required.
e. All mechanical equipment shall be located in such a manner to not to cause nuisance or discomfort from noise, fumes, odors, etc.

6. Exterior Fire Stairs. Non-enclosed, exterior fire stairs in no case shall be permitted.
7. Temporary Structures
   a. The only temporary structures permitted shall be those attendant to the construction of improvements on the site of a particular parcel or in connection with construction of any public improvements. Such structures will be removed upon the recording of a Notice of Completion for each work of improvement. Additionally, temporary structures for marketing and sales offices are authorized but must be removed upon obtaining of a Certificate of Occupancy of a permanent building, or if such case is not applicable, authorization by Community Development Director to permit such use for every 12 months shall be required.
   b. Such structures shall be placed as inconspicuously as possible and cause no inconvenience to the general public.
   c. Such structures may include modular units, construction/office trailer or security facilities.
8. Walks and Plaza Materials. Materials selected for walks and plazas shall be related to the materials of the buildings and compatible with walk and path system standards. Surface shall be non-skid finish. Layout and design shall provide maximum comfort and safety to pedestrians. Patterns for plaza paving should have an obvious relationship to the buildings.

F. Sign Regulations

The purpose of the Sign Regulations is to set forth the criteria to be used in evaluating proposals for all signing. This criteria will aid in eliminating excessive and confusing sign displays, preserve and enhance the appearance of ~~Lighthouse Marina~~ **the Rivers**, safeguard and enhance property values, and will encourage signs which by their good design are integrated with and are harmonious to the buildings and sites which they occupy.

These sign regulations are intended to complement the City of West Sacramento Sign Ordinance as well as other regulations noted for each zone category. In all cases, the most restrictive requirements will apply.

1. General Requirements
   a. In no case shall flashing, moving, or audible signs be permitted.
   b. In no case shall the wording of signs describe the products, sold, prices, or any type of advertising except as part of the occupant's place name or insignia.
   c. No signs of any sort shall be permitted on canopy roofs or building roofs.
   d. No sign or any portion thereof may project above the building or top of wall upon which it is mounted.
   e. No signs perpendicular to the face of the building shall be permitted, where visible from any public right-of-way.
   f. All signs in ~~Lighthouse Marina~~ **the Rivers** shall be placed flat against the building to which they are attached.
2. Design Requirements

a. The location of signs shall be only as shown on the approved improvement plan.
b. Painted lettering will not be permitted.
c. All electrical signs shall bear the UL label and their installation must comply with all local building and electrical codes.
d. No exposed conduit, tubing, or raceways will be permitted.
e. No exposed neon lighting shall be used on signs, symbols, or decorative elements.
f. All conductors, transformers, and other equipment shall be concealed.
g. All exterior letters or signs exposed to the weather shall be mounted at least three fourths inch (3/4") from the building to permit proper dirt and water drainage.
h. Location of all openings for conduit and sleeves in sign panels of building walls shall be indicated by the sign contractor on drawings. Installation shall be in accordance with the approved drawings.
i. No sign maker's labels or other identification will be permitted on the exposed surface of signs, except those required by local ordinance which shall be located in an inconspicuous location.

3. Miscellaneous Requirements
   a. Each occupant in a commercial or business zone will be permitted to place upon each entrance to its premises not more than 144 square inches of gold leaf or decal application, lettering, not to exceed two inches in height, indicating hours of business, emergency telephone numbers, and proprietorship. No other window signs will be allowed.
   b. Each occupant who has a non-consumer door for receiving merchandise may have uniformly applied on said door in a location, as directed by the ~~Architectural~~ **Design** Review ~~Board~~ **Committee** in two inch high block letters the occupant's name and address. Where more than one occupant uses the same door, each name and address shall be applied.
   c. Occupants may install street address numbers as the U.S. Post Office requires in the exact location stipulated.
4. Special Signing
   a. Floor signs, such as inserts into terrazzo, special tile treatment, etc., will be permitted within the occupant's lease line or property line if approved by the Community Development Director.
   b. The provisions of these Sign Regulations, except as otherwise expressly provided herein, shall not be applicable to the identification signs of any large department-type store, and it shall be understood and agreed that those occupants may have their usual identification signs on their buildings; however, there shall be no rooftop signs, or signs which extend above the parapet wall of the roof line of the building to which they are attached. Further, no sign shall be permitted that is flashing, moving or audible or placed perpendicular to the building.
   c. Informational and directional signs relating to pedestrian and vehicular flows within ~~Lighthouse Marina~~ **the Rivers** project area shall conform to standards set forth in a master sign program identifying style, color and coordinated graphics to be approved by the Community Development Director prior to issuance of a sign permit for any permanent informational or directional signs.
   d. One standard sign denoting the name of the project, the marketing agent, the contractor, architect, and engineer shall be permitted upon the commencement of construction. Said sign shall be permitted until such a time as a final inspection of the building(s) designates sad structure(s) fit for occupancy or the tenant is occupying said building(s), whichever occurs first.

e. Upon removal of the sign described in 4.d. above, a sign advertising the sale or lease of the site or building shall be permitted.

f. Permanent directional and identification signs for ~~Lighthouse Marina~~ **the Rivers** project, exceeding one hundred twenty-five (125) square feet (single face) for any one location shall be permitted but subject to use permit.

g. Temporary signs related to seasonal concessions may be granted as procedurally outlined in Item "N" of this Article.

h. Temporary real estate signs for ~~Lighthouse Marina~~ **the Rivers** Project of not more than 100 square feet (single face) for 3 locations shall be permitted subject to Community Development Director's approval.

ARTICLE EIGHT: Development Permit Regulations and Procedures

The objective of the requirement for specific site plans for specific parcels is to provide a logical sequence of community and governmental review and input. Such approved site plans for each area or sub-area are supplements to the ~~Lighthouse Marina~~ **the Rivers** Land Use Regulations.

The purpose of such site development permits is to provide for review of the detailed final plans of a project with respect to the architectural design, materials, colors, landscaping, and relationship to surrounding uses for an entire project. A site plan may also be approved to establish development standards.

A. Regulations and Procedures

1. The provisions of this ordinance are intended to supersede the requirements of the City of West Sacramento Zoning Code. Where events or circumstances occur which are not cited by this ordinance, the provision found in the previously cited chapters shall be utilized in resolving those events or circumstances.
2. Definitions of words or procedures utilized in this ordinance shall be the same as defined in the City of West Sacramento Zoning Code or clarified through interpretation by the City of West Sacramento Planning Commission or its designee.
3. Approval of Plans - All improvements constructed, placed, altered, maintained or permitted on any land in the PD-29 District shall be required to comply with the requirements of the City of West Sacramento, the Site Plan Approvals.
4. Modifications and Interpretations
   a. The Zoning Administrator may approve minor modifications of the development plans or standards of PD-29 pursuant to the authority of West Sacramento Zoning Ordinance. Should the matter involve a modification not determined by the Zoning Administrator to be minor, a change may be granted by the Planning Commission, pursuant to the provisions of the Zoning Ordinance.
   ~~b. The Planning Commission may approve the adjustment of specific land uses in location, acreage, density and intensity of use so long as the adjustment is consistent with and no more than the densities and intensities of use specifically itemized in the Development Agreement (D.A.).~~
   c. The site development standards of each land use sub-area of PD-29 are intended to facilitate flexible, creative urban design plans for coordinated mixed-use developments. Land use sub-areas granted ability to participate in mixed-use design strategy (PD-29 RE/RF/~~BP~~/CT/CR/CM) shall submit schematic plans in accordance with Article Eight, Section N.
   d. Upon the adoption of the schematic master plans by the City Council, the site development standards in Articles Two through Six shall be replaced by the standards set forth in the

schematic (master) plan. The limits set for in this section shall supersede that noted in Section K of Article Eight.

B. Review of Subsequent Project Applications

To the intent not prohibited by applicable law or the conditions of approval of any previous entitlement, or terms of a development agreement, the City of West Sacramento shall not accept any application from an applicant or property owner who is in violation of a previous entitlement All violations must be fully resolved to the satisfaction of the City before additional applications will be accepted. Any rejections of such an application may be appealed by the applicant to the Planning Commission.

C. Creation of Area or Sub-Area

No person shall create a lot or parcel upon which there will exist more than the number of dwelling units or maximum percentage of land coverage permitted by this Ordinance, except that more than such maximums may be created in connection with portions of a subdivision, which subdivision meets such standards as a whole, and the tentative map of which is approved by the City.

D. Protection of Subsequent Buyers

Where a lot or parcel is divided, the person making the division shall calculate the number of dwelling units and land coverage allocable to each of the resulting lots or parcels and shall note such allocations in the deeds to such resulting lots or parcels and on the lot or parcel map, if any, that is used to record such division.

E. Condominium/Time-Share Conversions

All conversions of residential, commercial, and office uses after the original approval of the project shall be subject to the requirements of the City of West Sacramento Zoning Code. The requirements shall be complied with prior to or in concert with the recordation of any required map.

F. Variances and Modifications

1. Variances from the terms of this Ordinance shall be granted by City of West Sacramento only if it is found that because of special circumstances applicable to the property, including size, shape, topography, location or surroundings, the strict application of the ordinance deprives such property of privileges enjoyed by other property in the vicinity and within the same use district, and the application shows that be cannot make any reasonable use of the property if this Ordinance is applied. Where such conditions are found, the variance permitted shall be the minimum departure from existing regulations necessary to avoid such deprivation of privileges enjoyed by such other property and to facilitate a reasonable use and shall not exceed 10 percent of the allowable standard.
2. The Planning Commission may grant variances and modifications to the land uses densities and intensities consistent with the EIR/EIS and consistent with Article Eight, Item 4. Appeals of decisions may be exercised pursuant to Article Eight.

G. Findings

A final decision on a permit or variance requiring review by the local jurisdiction shall include a statement of law and findings of the fact, separately stated. The statement of law shall specify the applicable statute, plan, or ordinance or rule and whether the statute, plan, ordinance or rule has been complied with. The findings of fact shall specify the items of evidence in the administrative record which support the decision.

H. Burden of Proof

The burden of proof is on the applicant to show an entitlement or an entitlement to a permit or variance pursuant to this Ordinance.

I. Violation of Ordinance

Violation of this ordinance or of the City Code of West Sacramento Zoning shall be a misdemeanor. Each day of violation constitutes a separate offense. Compliance or relief of violations may be sought by the City in either Municipal Court or Superior Court, depending on the degree of violation determined by the City.

1. Stop Order and Revocation of Permits
    a. Whenever the City of West Sacramento determines that any permit, approval of subdivision map or maps, whether tentative or final zoning matter, or variance or use permit, or any action being taken thereunder or any action not taken, under color of a permit, is in conflict with any ordinance of the City or determines that any such action is in conflict with any rule, regulation or policy of the City, such officer of the agency may issue a stop order which shall prohibit any action thereunder for a period of thirty-five (35) days. Such stop order shall be in writing, shall set forth the violations alleged to exist and may list remedies to be undertaken to correct the violations.

       The person receiving such a stop order shall report in writing to the officer or body issuing the order within forty-eight (48) hours the steps proposed to be taken to correct the violations. Such stop order may be extended by the Planning Commission for a period of not to exceed an additional thirty-five (35) days upon opportunity for hearing being extended to the affected parties. During the period of such stop order, the Commission shall review the matter as herein provided. A stop order issued pursuant to this section may be withdrawn by the Planning Commission or by the officer who issued it upon a finding that the circumstances giving rise to the stop order no longer exist. In addition or instead of the measures set forth, the Commission may revoke a permit upon finding violation of the approval or conditions thereto, and may cause to be removed all improvements constructed in reliance upon such permit, with costs to constitute a lien on the property. The Commission may also order restoration of the property.

    b. The City may suspend any permit or other approval whenever there has been a false statement or misrepresentation in the application as to any material fact on which the permit was based.

    c. The City may suspend a permit or other approval whenever a violation of the provisions of this Ordinance or of Conditions of Approval made pursuant to provisions of this Ordinance are found to exist.

    d. The City, after a hearing, may revoke the permit and may cause to be removed all improvement constructed in reliance upon such permit, and may seek reimbursement for all costs incurred. The Agency may also order restoration of the property.

    e. Any person may appeal to the City Council the imposition of any Condition of Approval, denial of a permit or other approval or revocation of a permit made by the Agency staff if such appeal is made in writing within fifteen (15) days after receiving notice from the staff to impose conditions or deny permits or other approvals.

J. Determination of Use

Where a combination of permitted, accessory and/or conditional uses are proposed within a single structure, the determination of the principal character of that structure shall be based on the floor area and/or intensity of use of each component. Standards of development shall be based on the requirements of each use.

K. Hazardous Materials

It shall be the responsibility of all applicants for any permitted, accessory, or conditional use to provide in the application for the safe delivery, storage, use and disposal of any hazardous materials to be used in the conduct of that use. Hazardous materials shall include toxic, radioactive and inflammable products. Where disposal involves a public utility, prior written concurrence shall be obtained from that

utility. Examples of measure could include a lockable fire-resistant area in a dwelling to shielded fireproof and monitored storage areas in businesses.

L. ~~Lighthouse Marina~~ The Rivers Planned Unit Development ~~Architectural~~ Design Review ~~Board~~ Committee

~~An Architectural~~ **The Design** Review ~~Board~~ **Committee** shall be so powered as per specifications in the ~~Covenants, Codes and Restrictions~~ **Community Charter** for **The Rivers** ~~Lighthouse Marina~~ Planned Development.

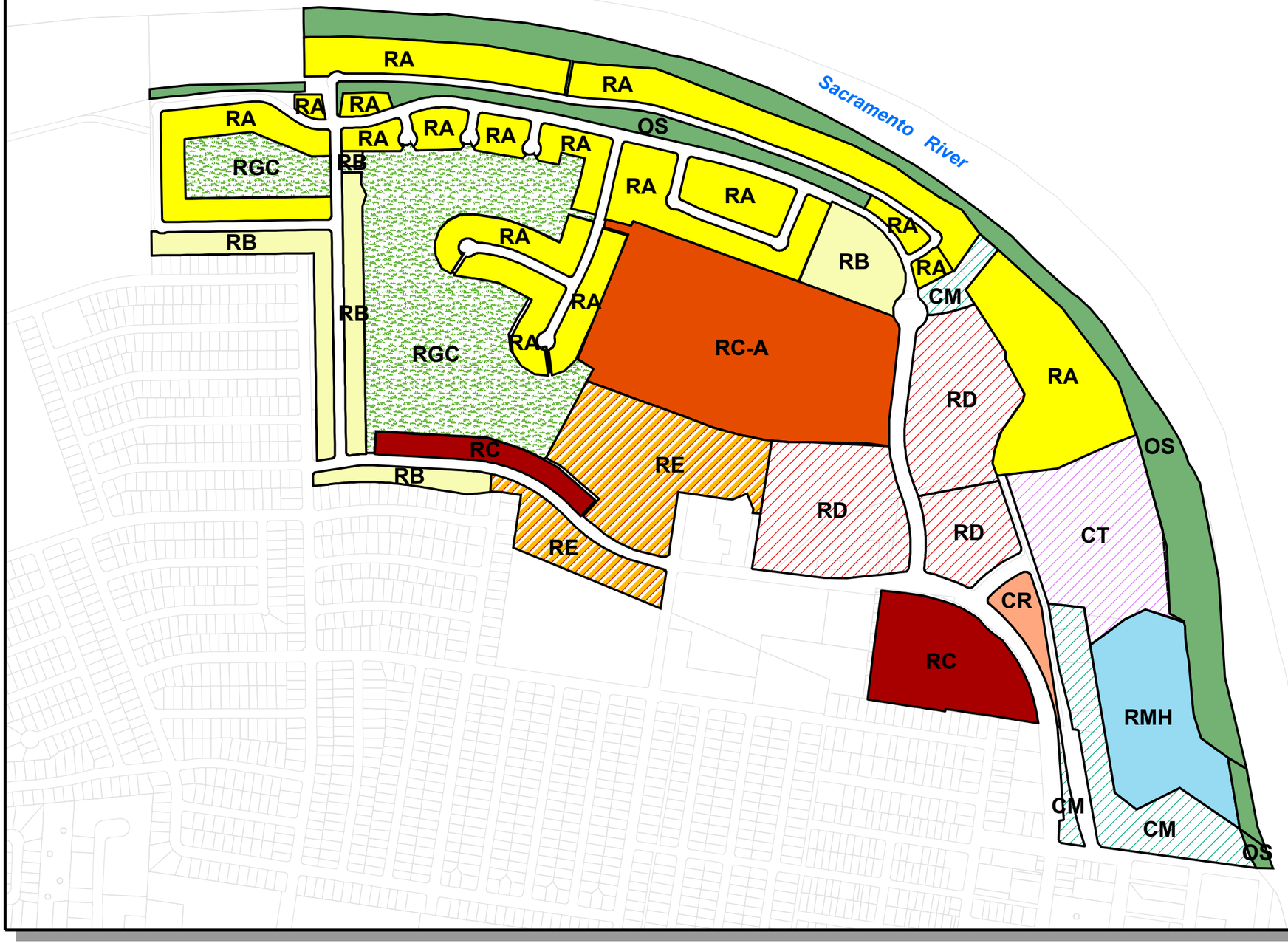
M. Procedures for Approval

Any applications submitted to the Community Development Director shall be submitted in duplicate to the office of the ~~Architectural~~ **Design** Review ~~Board~~ **Committee** for ~~Lighthouse Marina~~ **the Rivers**. Approvals, conditional approvals, or disapprovals shall be in writing to the applicant and signed by the technical representative of the ~~Architectural~~ **Design** Review ~~Board~~ **Committee** within thirty (30) days from the date of a completed submission. Application for approval of plans and specifications by the ~~Architectural~~ **Design** Review ~~Board~~ **Committee** shall be by two-phased submissions: (a) Schematic-Preliminary Phase submission and approval; and (b) Construction Documents submission and approval. Submissions must be made in the order indicated and approval of each submission must be obtained from the ~~Board~~ **Committee** before a subsequent submission on the same project will be considered by the ~~Board~~ **Committee**. In addition, a review of the completed construction and issuance of a Certificate of Compliance is required for each project. The Community Development Director shall respond to the applicant in writing no later than ten (10) days following receipt of the recommendation of the ~~Board~~ **Committee**.

Applications for approval of each phase shall contain the following submission and information:

1. Schematic-Plan Phase
    a. Site map showing existing topographic features and proposed building(s) in relation to adjacent and nearby roads and buildings.
    b. Site plan showing proposed grading, driveways, pathways, terraces, property lines, setback lines, proposed parking and storage areas, existing and proposed grades and proposed landscaping. Design development of these items shall be included.
    c. Plans and elevations of building(s) showing major dimensions, cross-sections, typical wall sections.
    d. Outline specifications and/or site development standards.
    e. Exterior colors and materials of construction.
2. Construction Documents Phase
    a. Complete working drawings including site development plan and landscaping plan. (See Drawing Check List below.)
    b. Specifications.
    c. Exterior colors and materials of construction.
3. Completion of Construction Certificate
    a. Upon notification of the completion of construction, the ~~Architectural~~ **Design** Review ~~Board~~ **Committee** will inspect the property and recommend to the Grantor the issuance of a Certificate of Compliance for the project. This Certificate will be issued by the Grantor under the same terms and conditions as the Estoppel Certificate, which is specified in the ~~Covenants, Codes and Restrictions~~ **Community Charter** .
4. Drawing Check List
    a. Names and addresses of builder, contractor, developer, etc.
    b. Project site plat with dimensions taken from signed record plat.

c. Al1 submissions must include topography showing existing grades/and proposed grades at one foot intervals with spot elevations as required to clarify drawings, also show building corner elevations and floor elevations.
d. Proposed landscaping, including automatic irrigation system.
e. Retaining walls.
f. Street names.
g. Locations and details of temporary and permanent signs.
h. Temporary and permanent fences and wind and water erosion control devices.
i. Temporary and permanent storage and stockpiling areas.
j. Front, side and rear distances from building to property lines.
k. Easements and rights-of-way.
l. Pipes, berms, ditches, swales.
m. Driveways, panting areas, traffic patterns, pathway and lighting, existing and proposed.
n. Locations and details of benches and patios.
o. Exterior storage and screening devices for trash, mechanical equipment and meters.
p. Light poles and transformers.
q. Sewer alignments and location of manholes and inverts.
r. Show existing inlets and top of plate elevations, if any.
s. Mailboxes.
t. Roof projections and screening treatment.



Legend

Land Use

PD 29 ZONE

- CM - Marina Commercial
- CR - Retail Commercial
- CT - Tourist Commercial
- RA - Single Family
- RB - Single Family
- RC - Single Family
- RC-A - Single Family
- RD - Condo/Apartment
- RE - Condo/Apartment
- OS - Open Space
- RGC - Golf Course
- RMH - Marina/Harbor
- Parcels

600 300 0 600 Feet

The Rivers Land Use Map
WF PD 29

N W E S

NOLTE BEYOND ENGINEERING

APPENDIX B
Final Water Supply Assessment for the Rivers Phase II Project

City of West Sacramento

Final

Water Supply Assessment

for the

Proposed Rivers

Phase II Project

April 2006

Prepared by:



EIP Associates
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Sacramento, CA 95814

DRAFT WATER SUPPLY ASSESSMENT FOR THE PROPOSED RIVERS PHASE II PROJECT

INTRODUCTION

The Rivers Phase II Project (proposed project) includes development of approximately 626 single-family homes, an approximately 12.3-acre K-8 school, a two-acre park, and supporting infrastructure on approximately 68 acres of the approved Lighthouse Marina and Riverbend Development Project area in the City of West Sacramento. If the Washington Unified School District (WUSD) does not construct and operate the school, then the project would construct an additional 176 residential units on the 12.3-acre site for a total of 802 units. The proposed project also includes installation of approximately 3,000 linear feet of bank stabilization along the Sacramento River between River Mile 60.5 and 61.3. Finally, the proposed project includes text amendments to PD-29, approval of a small lot (vesting) tentative subdivision map.

As part of its consideration of the proposed project, the City is conducting an environmental review under the requirements of the California Environmental Quality Act (CEQA). The environmental review for the proposed project includes the need for an assessment of adequate water supplies available to serve the project. The requirements for such a water supply assessment (WSA) are described in the sections of the California Water Code (Water Code) amended by the enactment of Senate Bill 610 (SB 610) in 2002 (primarily Sections 10910 through 10915). In addition, the proposed project also includes consideration of a large lot tentative subdivision map. Approval of the tentative subdivision map will also require a written verification of available water supplies under the sections of the Public Resources Code amended by the enactment of Senate Bill 221 (SB 221) in 2002 (primarily Section 66473.7). This report is designed to fulfill the requirements of these two laws.

Senate Bill 610 and SB 221 provide a nexus between the regional land use planning process and the environmental review process. As noted above, the core of these laws is an assessment of whether available water supplies are sufficient to serve the demand generated by a project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under a range of hydrologic conditions. This WSA provides information with regards to an assessment of the available water supply to serve the proposed project, based on the sections of the Water Code amended by SB 610. Subsequently, this information may be used as part of the written verification of water supplies, as required under SB 221.

PROJECT DESCRIPTION

The proposed Rivers Phase II project residential development is located on approximately 68 acres of the approved Lighthouse Marina and Riverbend Development Project area within the boundaries of the former Lighthouse Golf Course (Figures 1 and 2). The residential development site is bordered by the Sacramento River on the north, East Fountain Drive on the east, Lighthouse Drive on the south, and West Fountain Drive and Westlake Drive on the west. The area has a typical climate for the central Sacramento Valley, as precipitation averages roughly 20 inches per year (primarily in the form of winter rains) and average high temperatures range in the upper 50s during the winter months and upper 90s during the dry summer months.

Figure 1. Proposed Project Location.

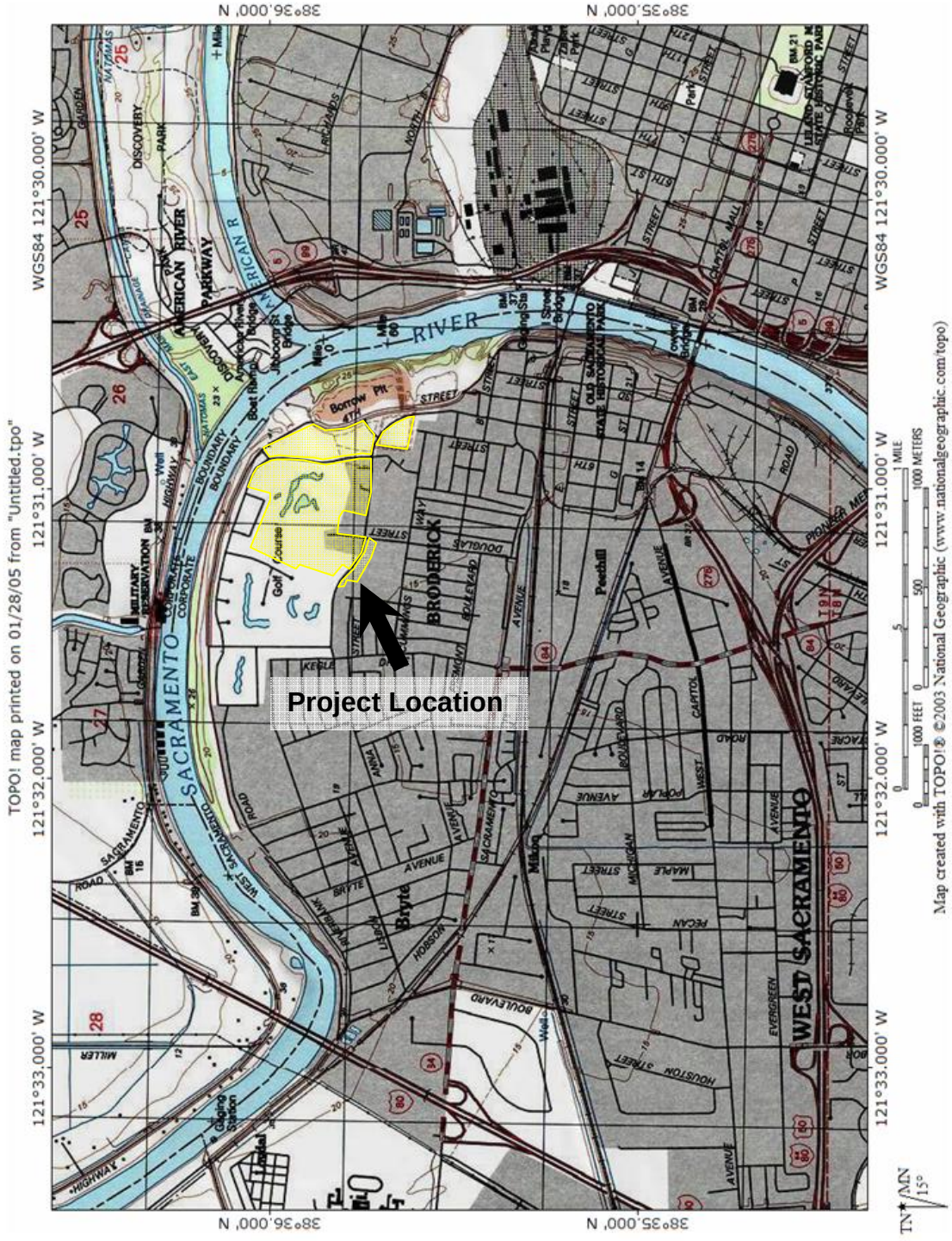


Figure 2. Proposed Project Area



This mixed-use development will include approximately 626 single-family residences, a 12.3-acre K-8 public school, a two-acre park, a trail system and supporting infrastructure on roughly 68 acres in the northern portion of the City (Scenario A). Under Scenario A, there will be 338 Single-Family Attached units (SFA) and 288 Single-Family Detached units (SFD). However, if the Washington Unified School District (WUSD) determines that it does not want to construct the proposed school, then the project will construct an additional 176 residential units for a total of 802 units (Scenario B). Under Scenario B, there will be 514 SFA units and 288 SFD units. A summary of the proposed land uses for these two scenarios within the Rivers Phase II Project area can be found in Table 1.

TABLE 1

SUMMARY OF PROPOSED PROJECT LAND USES

	Scenario A With School		Scenario B Without School	
Proposed Project Uses	**Acres**	**Units**	**Acres**	**Units**
Single-Family Residential	53.5	626	65.8	802
K-8 School	12.3			
Park	2.0		2.0	
Total	***67.8***	**626**	**67.8**	**802**

Source: Correspondence from Alberto Esquivel, Project Manager, The Grupe Company to EIP, March 3, 2005

WATER SUPPLY PLANNING UNDER SB 610 and SB 221

Senate Bill 610 and SB 221 were passed into law on January 1, 2002. These laws reflect the need to incorporate water supply and demand analysis at the earliest possible stage in the planning process. SB 610 amended portions of the Water Code, including Section 10631, which contains the Urban Water Management Planning Act, and Sections 10656, 10910, 10911, 10912, 10913 and 10915. SB 221 amended Section 65867.5 and added Sections 66455.3 and 66473.7 to the Government Code relating to land use. Upon signing these bills, Governor Davis stated, "Most notably, these bills will coordinate local water supply and land use decisions to help provide California's cities, farms and rural communities with adequate water supplies. Additionally, these bills increase requirements and incentives for urban water suppliers to prepare and adopt comprehensive management plans on a timely basis."[1]

The primary effect of SB 610 was to modify Sections 10910 through 10915 of the Water Code, as well as Section 10631, which relates to Urban Water Management Plans (UWMPs). SB 610 is designed to build on the information that is typically contained in a UWMP, and the amendments to Water Code Section 10631 were designed to make the two processes consistent. A key difference is that UWMPs are required to be revised every five years, in years ending with either zero or five, while WSAs are required as part of the environmental review process for each individually qualifying project. As a result, the 20-year planning horizons for each document may cover slightly different planning periods than other WSAs or the current UWMP. Additionally, not all water providers who must prepare a WSA under SB 610 are required to prepare a UWMP.

Under SB 221, approval by a city or county of certain residential subdivisions, as defined by California Government Code Section 66473.7 (a) (1), requires an affirmative written verification of sufficient water supply. SB 221 is designed as a "fail-safe" mechanism to ensure that collaboration on finding the needed water supplies to serve a new large subdivision occurs early in the planning process. This verification must also include documentation of historical water deliveries for the previous 20 years, as well as a description of reasonably foreseeable impacts of the proposed subdivision on the availability of water resources of the region. As a result of the information contained in the written verification, the city or county may attach conditions to assure that water supply is part of the map approval process.

SB 610 Water Supply Assessment

The SB 610 water supply assessment process involves answering the following questions:

1. Is the project subject to CEQA?
2. Is it a project under SB 610?
3. Is there a public water system?
4. Is there a current UWMP that accounts for the project demand?
5. Is groundwater a component of the supplies for the project?
6. Are there sufficient supplies available to serve the project over the next 20 years?

"Is the Project Subject to CEQA?"

The first step in the SB 610 process is determining whether the project is subject to CEQA. SB 610 amended Public Resources Code Section 21151.9 to read: "Whenever a city or county determines that a project, as defined in Section 10912 of the Water Code, is subject to this division [i.e., CEQA], it shall comply with part 2.10 (commencing with Section 10910) of Division 6 of the Water Code." Section 15083.5 of the CEQA Guidelines addresses consultation

between a city or county and the local water supplier for specific projects. The proposed project is subject to CEQA at a project-level analysis.

"Is It a Project Under SB 610?"

The second step in the SB 610 process is to determine if a project meets the definition of "Project" under Water Code Section 10912 (a). Under this section, a "Project" is defined as meeting any of the following criteria:

1. A proposed residential development of more than 500 dwelling units;
2. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (ft^2) of floor space;
3. A commercial building employing more than 1,000 persons or having more than 250,000 ft^2 of floor space;
4. A hotel or motel with more than 500 rooms;
5. A proposed industrial, manufacturing, or processing plant, or an industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 ft^2 of floor area;
6. A mixed-use project that includes one or more of these elements; or
7. A project creating the equivalent demand of 500 residential units.

Alternately, if a public water system has less than 5,000 service connections, the definition of a "Project" also includes any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of service connections for the public water system. The proposed Rivers Phase II project plan includes more than 500 residential dwelling units; therefore, Rivers Phase II qualifies as a "Project" under Section 10912 (a) of the Water Code.

"Is There a Public Water System?"

The third step in the SB 610 process is determining if there is a "public water system" to serve the project. Section 10912 (c) of the California Water Code (Water Code) states: "[A] public water system means a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections." The City is the water supplier to this area. Although the City has used groundwater in the past to meet demand, the City now relies solely on surface water to meet demand, primarily in the form of diversions from the Sacramento River under agreement between the North Delta Water Agency and the State of California, and an appropriative water right entitlement (Permit #18150), issued to the City by the State Water Resources Control Board, as well as a contract with the U.S. Bureau of Reclamation for delivery of Central Valley Project (CVP) supplies.

"Is There a Current UWMP That Accounts for the Project Demand?"

Step four in the SB 610 process involves determining if there is a current UWMP that considers the projected water demand for the project area. The Water Code requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per annum (afa), must prepare a UWMP, and this plan must be updated at least every five years on or before December 31, in years ending in five and zero.

Water Code Section 10910 (c)(2) states, "If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water

management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g) [i.e., the WSA]."

The City's current UWMP was adopted in December 2000 and revised in July 2002. Therefore, the information contained in the current UWMP serves as the foundation for this assessment. As required by law, a new update will be prepared for release in December 2005. However, this information has not yet been developed or made available. In addition, the City has a current Water System Master Plan. Finally, a Water Modeling Study for the proposed project was prepared in December 2004 for the City of West Sacramento by Nolte Engineering (Nolte 2004). These documents are also used for reference in determining available water supplies in this assessment.

"Is Groundwater a Component of the Supplies for the Project?"

This section addresses the requirements of Water Code Section 10910 (f), paragraphs 1 through 5, which apply if groundwater is a source of supply for a proposed project. In the past, the City did receive some of its potable water supplies from local groundwater sources. However, due to the poor water quality in these wells, the City has made a decision to discontinue the use of groundwater and formally abandon its wells.[2] The Technical Memorandum prepared by the engineering firm of West Yost & Associates states, "The City used groundwater as its only supply source in the past, and still has some existing wells. In general, however, the wells are not in good operating condition and the quality of water they produce is poor. Use of groundwater in the City thus also involves the need to treat the water to remove iron, manganese, methane, and possible arsenic."[3] As a result, groundwater supplies will not be considered part of the City's available water supplies, and no further discussion of groundwater or the groundwater basin is necessary in this assessment.

"Are There Sufficient Supplies to Serve the Project Over the Next Twenty Years?"

The next step in the SB 610 process is to prepare the actual assessment of the available water supplies, including the availability of these supplies in all water-year conditions over a 20-year planning horizon, and an assessment of how these supplies relate to project-specific and cumulative demands over that same 20-year period. In this case, that period will cover the years 2005 to 2025.

Water Code Section 10910 (c)(4) states: "If the city or county is required to comply with this part pursuant to subdivision (b), the water assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses."

There are three primary areas to be addressed in a water supply assessment. Each of these will be discussed in the following sections, and include: the relevant water supply entitlements, water rights and water contracts; a description of the available water supplies; and an analysis of the demand placed on those supplies, both by the project and on a cumulative basis.

<u>Water Supply Entitlements and Water Rights</u>

Water Code Section 10910 (d)(1) states: "The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of

the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights or water service contracts."

The State Water Resources Control Board (SWRCB) is charged with coordinating the water rights and water quality functions of the state, as well as managing the Water Code. The Water Code applies only to surface water resources, and those "subterranean streams flowing through known and identifiable channels [Section 1200]," although according to the SWRCB, "California law also recognizes and protects rights to extract and use waters percolating beneath the surface of the land. Again, while the Water Code implies the existence of these groundwater rights, their doctrinal bases and characteristics are essentially the product of the decisions of our courts."[4]

The majority of the City is located within the boundaries of the North Delta Water Agency (NDWA), and therefore water supplies for these sections of the City are guaranteed by the contract between the NDWA and the State of California. The remainder of the City receives surface water under two other entitlements: an appropriative water right (Permit 18150, issued by the SWRCB) and a contract with the U.S. Bureau of Reclamation (USBR). Copies of contracts are included in Appendix A.

North Delta Water Agency

A large portion of the City's surface water supplies are guaranteed under the contract between the NDWA and the State of California. This contract, which was negotiated in 1981, includes supplies from both the State Water Project (SWP) and Central Valley Project (CVP). These deliveries have never been reduced under drought conditions. However, the northern boundary for the NDWA is the Union Pacific Railroad, which lies to the south of the proposed Rivers Phase II project area. According to the City's current UWMP (2002 UWMP), the area north of the railroad is served either by the City's appropriative rights, or under contractual entitlements (i.e. CVP deliveries), as the NDWA supply is not available. Therefore, the NDWA supply cannot be considered as a source for the proposed Rivers Phase II project.[5]

Permit 18150

The City holds an appropriative right for diversions from the Sacramento River under Permit 18150, which was issued by the SWRCB in 1981. Permit 18150 allows the City to divert up to 18,350 acre-feet per annum (afa) from the Sacramento River at the Bryte Bend Water Treatment Plant intake structure. However, this permit also limits the diversion of water to the periods of January 1 through June 30, and September 1 through December 31 of each year. In addition, the maximum instantaneous rate of diversion for municipal use under this permit is 62 cubic feet per second (cfs), which is equivalent to approximately 40 million gallons per day (mgd). Furthermore, this permit is subject to reduction by the SWRCB in the event of drought conditions and/or to meet downstream water quality objectives. The City's appropriative rights under Permit 18150 were reduced by 100 percent during the drought years of 1991 and 1992 between the months of June and October.[6]

Bureau of Reclamation Contract No. 0-07-20-W0187

In 1980, the City entered into a 40-year agreement with the USBR authorizing diversion from the Sacramento River as part of the CVP in order to "obtain a firm surface water supply during the summer months."[7] Under the terms of this contract (W0187), the City is allowed to divert up to a combined 23,600 afa from the Sacramento River under its appropriative rights (Permit

18150) and CVP water. The CVP contract does not limit the maximum rate or months of diversion. The contract does, however, require the City to pay for specified percentages of diverted water during the months of June through September. Provisions in the contract allow for the renewal of the contract for successive periods, and to increase or decrease the amount of water available to the City. The contract also states that the USBR will use all reasonable means to prevent shortages in the quantity of water available to the City. Under the drought conditions of 1992, CVP diversions were reduced by 75 percent, which is the maximum reduction the City has experienced.[8]

Reliability of Available Water Supplies

The City receives surface water diversions from the Sacramento River for use in the proposed project area under Permit 18150 and USBR Contract W0187. The City's UWMP states, "Because water supply in the portions of the City lying within the NDWA is ensured in all years, diversions from the Sacramento River under the City's water right and CVP contract can be used to provide water supply to just the area of the City lying outside the NDWA boundary"[9] (UWMP 2002). These entitlements provide the proposed project area with sufficient supplies to meet all demand, except during the period of June 1 through October 31, when the City's water right is restricted and the USBR contract supplies could be reduced. Therefore, this five-month period is the focus of this analysis.

The City's UWMP states, "Based on historical restrictions, the worst case scenario for the City appears to be a 100% restriction in diversion under the City's water right from June 1 through October 31, with a simultaneous restriction in [USBR] delivery of 25% of contractual entitlement. Based on a [USBR] entitlement of 23,600 afa, and City use during the months of no restriction (November through May) equal to about 43% of annual demand, the USBR contract water available to the City in the months of likely diversion restrictions would be equal to about 57% of the [USBR] entitlement, or about 13,452 afa."[10]

The City developed four drought supply scenarios based on this calculation (i.e., normal water year supply during the summer months equals 13,452 afa in the area outside of the NDWA boundary). The first assumed a 100 percent restriction in diversion under the City's water rights from June 1 through October 31 and a 25 percent restriction of CVP supplies for a total five-month supply of 10,089 afa. The second scenario assumed a 100 percent restriction on the City's water rights and a 50 percent restriction in CVP supplies for a total five-month supply of 6,726 afa. The third scenario assumed a 100 percent reduction to the City's water rights, and a 75 percent restriction on CVP supplies for a total five-month supply of 3,363 afa. The fourth scenario assumed 100 percent restrictions on both the City's water rights and the CVP diversion.

These scenarios were further analyzed in a technical memorandum prepared for the City in March 2004. This memo stated: "At full build-out of the [City's] current General Plan, the City's diversion under its water right could be reduced to zero during the months of June through October, and the City would still have sufficient water to meet demands in the portion of the City lying outside the NDWA boundary [i.e., the proposed project area], unless the water diverted under the Bureau of Reclamation contract was reduced below 25% of its face value. This means that the City's diversion would have to be cut by 100%, and the diversion under the USBR contract would have to be cut by more than 75% during the months of June through October, before the City would experience a shortfall in water supply."[11]

According to the City's UWMP, "If both the [USBR] contract and water right diversion entitlements are reduced to zero, the City would have to pump groundwater from its wells to

meet demand [during the summer months]."[12] However, the City has never faced such a scenario: "This severe a reduction in surface water diversion entitlements has never occurred on the Sacramento River, even during the severe droughts of 1976-77 and 1992-98. The most severe historical reduction in diversion by the municipal water utilities holding contracts with the USBR has been 25% (allowing for a diversion of 75% of the contractual entitlement). The most severe scenario outlined in the UWMP would reduce the City's diversions to one-third of the historic minimum level experienced during the worst droughts on record."[13] The four scenarios shown in the City's UWMP are displayed in Table 2 below.

TABLE 2

"OUTSIDE NDWA" WATER SUPPLIES DURING THE PERIOD JUNE 1 THROUGH OCTOBER 31 UNDER VARIOUS DROUGHT SCENARIOS (afa)

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Surface Water	10,089	6,726	3,363	0
Project Area Total	**10,089**	**6,726**	**3,363**	**0**

Source: City of West Sacramento's 2000 UWMP, Pages 3-3 and 5-4 (not including NDWA supplies).
Scenario 1 – 100 percent reduction of Permit 18150 and 25 percent reduction in CVP supplies
Scenario 2 – 100 percent reduction of Permit 18150 and 50 percent reduction in CVP supplies
Scenario 3 – 100 percent reduction of Permit 18150 and 75 percent reduction in CVP supplies (maximum historic reduction)
Scenario 4 – 100 percent reduction of all surface water supplies

Water Demand Projections

Water Code Section 10910 (c)(3) states, "If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, dry and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses." Based on the projections included in the City's 2002 UWMP, the demand for the portion of the City lying outside of the NDWA boundary will increase from a historic demand of 2,417 afa in 1999 to approximately 4,826 afa in 2020, as shown in Table 3 below. Upon reaching build-out in 2020, demand from June 1 through October 31 will average approximately 2,771 afa (57.4 percent of annual average demand)..

TABLE 3

ANNUAL ESTIMATED TOTAL "OUTSIDE NDWA" AREA WATER DEMAND THROUGH 2020

	1999 Demand (afa)	Unit Demand Factor* (gpd/du or gpd/ac)	Additional Units @ Build-out 2020	Additional Demand (afa)	Demand @ Build-out 2020 (afa)
Single Family Residential	1,713	560 gpd/du	674 du	423	2,136
Multi-Family Residential	295	290 gpd/du	1,219 du	396	691
Commercial	206	2,950 gpd/ac	279 ac	922	1,128
Industrial	5	2,950 gpd/ac	132 ac	436	441
Schools	68	25 gpd/student	0	0	68
Parks/Other	130	1,800 gpd/ ac	115 ac	232	362
Total	**2,417**			**2,409**	**4,826**

Source: City of West Sacramento's 2002 UWMP page 4-4.
* Note: Demand for residential uses is calculated in gallons per day per dwelling unit (gpd/du), while demand for commercial or other uses is calculated as gallons per day per acre (gpd/ac) and schools are calculated on gallons per student.

Water demand information is found in a series of tables on page 4-4 of the City's 2002 revised UWMP and reproduced Table 3. For the purpose of this assessment, SFD demand is given the demand estimate of 560 gallons per day per dwelling unit (gpd/du) for Single-Family Residential, while SFA units are assessed the demand factor for Multi-Family Residential (290 gpd/du). Table 4 shows the projected water demand for the proposed project under the two scenarios. Based on the unit demand factors presented in the City's 2002 UWMP, the proposed project under Scenario A would be expected to add a demand of approximately 310.1 afa, while Scenario B would add approximately 353.2 afa or a difference of roughly 43.1 afa. Based on the total estimates of future demand outside of the NDWA area, either scenario would only account for approximately 13 percent and 15 percent respectively of the project increase in demand of 2,409 afa. The 68 acres of the proposed project represents 15 percent (Shown in Appendix B) of the major development projects outside the NDWA and therefore can be assumed to be included in 2002 UWMP build out demand projections.

TABLE 4

ESTIMATED RIVERS PHASE II DEMAND SCENARIO A VS. SCENARIO B

		Scenario A			Scenario B		
Land use	**Unit Demand Factor**	**Unit**	**Demand (afa)**	**Percent demand increase Outside NDWA**	**Unit**	**Demand (afa)**	**Percent demand increase Outside NDWA**
Single-Family Detached	560 gpd/du	220 du	138.0	33%	220 du	138.0	33%
Single-Family Attached	290 gpd/du	406 du	131.9	33%	586 du	190.4	48%
Commercial	2,950 gpd/ac	0	0.0	0%	0	0.0	0%
Industrial	2,950 gpd/ac	0	0.0	0%	0	0.0	0%
Schools	25 gpd/student	550 students	15.4	NC	0	0.0	NC
Parks/Other	1,800 gpd/ ac	2.0 ac	24.8	11%	2.0 ac	24.8	11%
Total			**310.1**	13%		**353.2**	15%

Unit Demand factors from City of West Sacramento's 2002 UWMP.
NC = not calculated because project growth is 0.

COMPARISON OF WATER SUPPLY VS. DEMAND

Due to the unique supply issues associated with the City's water supplies for that portion of the City located outside of the NDWA boundary (including the Proposed Project area), this analysis does not consider the City's entire water supplies and demand. Therefore, this discussion will address the area outside of the NDWA, which includes the Proposed Project area. In addition, the demand analysis is focused on the period of June 1 through October 31, when supply reliability for this area under the City's entitlements may be restricted; the City's entitlements ensure adequate water supplies throughout the balance of the year.

The four drought supply scenarios are described in the City's 2002 UWMP. The first assumed a 100 percent restriction in diversion under the City's water rights from June 1 through October 31 and 25 percent restriction of CVP supplies for a total five-month supply of 10,089 afa. The second scenario assumed a 100 percent restriction on the City's water rights and a 50 percent restriction in CVP supplies for a total five-month supply of 6,726 afa. The third scenario assumed a 100 percent reduction to the City's water rights, and a 75 percent restriction on CVP supplies for a total five-month supply of 3,363 afa. The fourth scenario assumed 100 percent restrictions on both the City's water rights and the CVP diversion.

TABLE 5

"OUTSIDE NDWA" WATER SUPPLIES VS. DEMAND AT BUILD-OUT DURING THE PERIOD JUNE 1 THROUGH OCTOBER 31 UNDER VARIOUS DROUGHT SCENARIOS

	Scenario 1 (afa)	Scenario 2 (afa)	Scenario 3 (afa)	Scenario 4 (afa)
Total Project Area Supplies	10,089	6,726	3,363	0
Total Demand at Build Out	2,771	2,771	2,771	2,771
Difference	**7,318**	**3,995**	**592**	**-2,771**

Source: City of West Sacramento's 2002 UWMP, page 5-4; West Yost Technical Memorandum 2004.

Table 5 shows a comparison of the available water supply for the portion of the City outside of the NDWA boundary during the critical period (June 1 through October 31) under each of the four scenarios, as described in the UWMP. Build-out of the General Plan is expected to occur prior to the year 2020. The total demand figures would be adjusted slightly if Scenario B is implemented, but the difference is less than two percent of the total demand. Based on this information, the City would have sufficient water supplies to meet future demand under Scenario 1, Scenario 2 and Scenario 3. The restrictions listed under Scenario 4 (i.e., no surface water supplies from either entitlement) have never been implemented, even during the worst drought periods on record (i.e., 1976-77 and 1992-98).

In the extreme and unlikely event that Scenario 4 restrictions are implemented in the future, the City would have to find an emergency supply, or implement an aggressive demand reduction program, or a combination of the two. However, there is little chance that Scenario 4 would ever occur, as this would jeopardize the City's ability to meet its public health and safety requirements as a municipal water supplier. The most important qualifier, according to the West Yost report stated, "It is extremely unlikely that the Bureau would ever be able to reduce water diversions below this level in any drought." (West Yost, 2004)

FINDING OF ASSURED WATER SUPPLY FOR THE PROJECT

Section 10911(c) of the Water Code states, "The city or county shall determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses." A finding can be made that there is an assured water supply for the proposed Rivers Phase II project based on the analysis contained in the City's current Urban Water Management Plan, as well as this WSA under Scenarios 1, 2 and 3. Although the City would not have sufficient water to meet demand under Scenario 4 during the summer months, the City has never experienced the restrictions included in Scenario 4 and could adopt a finding to that effect. This analysis concludes that the City will have sufficient supplies to meet demand under all conditions through 2025, including those portions of the City lying outside of the NDWA boundary, except in the event of an extended drought during the period of June 1 through October 31 as presented in Scenario 4. In all other months (and in the portion of the City within the NDWA boundary) and Scenarios 1 through 3, the City will have sufficient surface water supplies to meet projected demand.

In order to adopt a finding of an assured water supply, the City will need to also adopt the following findings:

- The City finds that it is extremely unlikely that the surface water diversions allowed under USBR Contract No. W0187 will ever be restricted under Scenario 4.

- The City finds that if the entitlements are restricted between June 1 and October 31, the City will have to implement an aggressive demand reduction, seek an emergency supply source, or more likely, use both measures simultaneously.

FUTURE ACTIONS

The City will need to adopt this assessment as part of the environmental review for the proposed Rivers Phase II project, including the findings described above. Section 10911 (b) of the Water Code states, "The city or county shall include the water assessment provided pursuant to Section 10910, and any information provided pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code [i.e., CEQA]."

Additionally, this project is subject to the changes in the Government Code resulting from SB 221. As a result, as a condition of the tentative subdivision map for the proposed project, the City will need to produce a Written Verification of available water supplies. In order to meet the requirements for Written Verification, the potential shortfall between supply and demand during the period of June 1 through October 31 under Scenario 4 will need to be addressed.

ENDNOTES

1. Department of Water Resources, *Guidebook for Implementation of SB 610 and SB 221 of 2001,* 2003.

2. Michael Bessette, Associate Civil Engineer, City of West Sacramento, Engineering Division, personal communication, March 15, 2005.

3. West Yost & Associates, Inc., Technical Memorandum, Subject: Treated Water Storage, to the City of West Sacramento, dated March 8, 2004, page 2.

4. State Water Resources Control Board, *Statutory Water Rights Law*, Sacramento, CA, 1999, page vi.

5. City of West Sacramento, 2000 *Urban Water Management Plan,* revised 2002, page 3-4.

6. City of West Sacramento, 2000 *Urban Water Management Plan,* revised 2002, page 3-3.

7. City of West Sacramento, 2000 *Urban Water Management Plan,* revised 2002, page 3-3.

8. City of West Sacramento, 2000 *Urban Water Management Plan,* revised 2002, page 3-3.

9. City of West Sacramento, 2000 *Urban Water Management Plan,* revised 2002, page 5-1.

10. City of West Sacramento, *Urban Water Management Plan,* 2002 revised, page 5-4.

11. West Yost, *Technical Memorandum,* March 2004, page 9.

12. City of West Sacramento, 2000 *Urban Water Management Plan,* revised 2002, page 5-4.

13. West Yost, *Technical Memorandum,* March 2004, page 4.

APPENDIX C
Hydraulic Analysis of “The Rivers Bank Stabilization Project”

MBK ENGINEERS

Water Resources • Flood Control • Water Rights

M E M O R A N D U M

DATE: February 13, 2006

TO: Grupe Lighthouse File

FROM: Don Trieu, P.E.

SUBJECT: Hydraulic Analysis of "The Rivers Bank Stabilization Project"

This memorandum documents the hydraulic analysis of the proposed bank stabilization project on the right bank of the Sacramento River at RM 60.0. Grupe Development (Grupe) is proposing to stabilize the bank of the river coupled with habitat enhancement at the site. The purpose of the hydraulic analysis is to determine if the proposed project will have any impacts to the water surface elevation and flows during extreme flood events.

The proposed project consists of stabilizing and enhancing 3,000 lineal feet of river bank on the Sacramento River at RM 61.0. Fill material will be placed to restore the bank slope to a 2:1 (H:V) slope. This slope will then be armored with riprap to protect it from future erosion. A longitudinal dike consisting of stone would then be constructed. A berm will then be created by backfilling the area between the stone dike and repaired slope using suitable soil material. Native vegetation will be planted and established on the berm and through the armor on the upper levee slope for habitat enhancement. A typical levee cross section is shown on Plate 3.

The methodology for the hydraulic analysis was to simulate the proposed project condition and then compare the results with the without project condition to determine if there are any impacts to the water surface elevation and flows. The project condition will be analyzed under two scenarios:

1. "Project Condition 1" - The proposed Grupe project alone.

2. "Project Condition 2" - The proposed Grupe project in addition to the cumulative development components. The cumulative development components consist of future development along the Sacramento River which may include new bridges, docks, marinas, and vegetation enhancement. These components were defined and analyzed by MBK Engineers for the Sacramento River Corridor Floodway Planning Forum (Forum). The hydraulic analysis for that effort is documented in a report dated June 27, 2005, "Hydraulic Impact Analysis of Cumulative Development in Sacramento River Corridor Floodway" (Corridor Report). See Appendix A for the Corridor Report.

The hydraulic analysis was performed using a modified version of the Sacramento River basin UNET model that was developed by the U.S. Army Corps of Engineers. Documentation of the model can be found in the Section 2 of the Corridor Report.

The project condition was modeled by increasing the Manning's roughness coefficient in the hydraulic model along the project area. Cross section roughness values at RM 61.0, 61.25, and 61.5 were modified on the right bank in the model to reflect the vegetation enhancement (Plate 4). Under existing conditions, the Manning's roughness value used in the mode on the right bank at cross section locations was 0.045. A Manning's roughness coefficient of 0.1 was applied to the right floodplain of the cross section from elevation 0.0 feet NGVD to the right bank levee under project conditions. A value of 0.1 is reasonable estimate for a heavy stand of trees and is consistent with "Open Channel Hydraulics" Chow which recommends a value of 0.08 to 0.12.

Each of the two project condition scenarios were simulated for two flood events:

1. January 1997 Flood

2. "Maximum Flow" flood event. This event is modeled using the 1 in 100 AEP flood event on the Sacramento River basin with the 1 in 200 AEP flood event on the American River. The flow data used was from the Sacramento Centering hydrology developed by the Corps for the Comp Study. The "Maximum Flow" flood event simulation used a system-wide assumption that levees would overtop but would not fail. This combination of events and levee assumptions represents a maximum flow condition for the urban center from the Sacramento Weir downstream to Freeport.

Results:

This section presents the impacts to the water surface elevation and flows of the two project conditions described above:

I. Water Surface Elevation

A. January 1997 Flood Simulation

- Project Condition 1 - Table 1 tabulates the maximum water surface elevation at selected locations and the impact of Project Condition 1. Plots of the Sacramento River maximum water surface profile for Project Condition 1 were not included because it is identical to the existing condition plot. See Figure 1 for the existing condition plots.

- Project Condition 2 - Plots of the Sacramento River maximum water surface profiles for the January 1997 flood for with and without project are provided in Figure 1. Table 2 tabulates the maximum water surface elevation at selected locations and the impact of Project Condition 2.

B. "Maximum Flow" Flood Simulation

- Project Condition 1- Table 1tabulates the maximum water surface elevation at selected locations and the impact of Project Condition 1. Plots of the Sacramento River maximum water surface profile for Project Condition 1 were not included because it is identical to the existing condition plot. See Figure 2 for the existing condition plot.

- Project Condition 2 - Plots of the Sacramento River maximum water surface profiles for the "Maximum Flow" scenario for with and without project are provided in Figure 2. Table 2 tabulates the maximum water surface elevation at selected locations and the impact of Project Condition 2.

Table 1: Project Condition 1 Peak Stage Summary

Location	January 1997 Flood Simulation			"Maximum Flow" Flood Simulation		
	Peak Stage (ft. NGVD)		Impact (ft.)	Peak Stage (ft. NGVD)		Impact (ft.)
	Existing	Project Condition 1		Existing	Project Condition 1	
Sacramento River						
u/s end Fremont Weir	39.16	39.16	0.0	40.38	40.38	0.0
d/s end Fremont Weir	39.08	39.08	0.0	40.28	40.28	0.0
at Verona gage	39.31	39.31	0.0	40.67	40.67	0.0
u/s I-5 Marina	35.37	35.37	0.0	37.32	37.32	0.0
u/s San Juan Rd. Marina	31.38	31.38	0.0	34.18	34.18	0.0
u/s end Sac Weir	30.01	30.01	0.0	33.17	33.17	0.0
d/s end Sac Weir	30.53	30.53	0.0	33.52	33.52	0.0
u/s end of "The Rivers"	30.53	30.53	0.0	33.66	33.66	0.0
at I Street	30.25	30.25	0.0	33.48	33.48	0.0
at Freeport gage	23.97	23.97	0.0	26.90	26.90	0.0
at Snodgrass Slough	19.24	19.24	0.0	21.83	21.83	0.0
Yolo Bypass						
at Woodland gage	31.39	31.39	0.0	33.05	33.05	0.0
at Lisbon gage	24.12	24.12	0.0	26.02	26.02	0.0

Table 2: Project Condition 2 Peak Stage Summary

Location	January 1997 Flood Simulation			"Maximum Flow" Flood Simulation		
	Peak Stage (ft. NGVD)		Impact (ft.)	Peak Stage (ft. NGVD)		Impact (ft.)
	Cumulative Development [1]	Project Condition 2		Cumulative Development [1]	Project Condition 2	
Sacramento River						
u/s end Fremont Weir	39.19	39.19	0.0	40.41	40.41	0.0
d/s end Fremont Weir	39.11	39.11	0.0	40.31	40.31	0.0
at Verona gage	39.37	39.37	0.0	40.72	40.72	0.0
u/s I-5 Marina	35.57	35.57	0.0	37.47	37.47	0.0
u/s San Juan Rd. Marina	31.49	31.49	0.0	34.27	34.27	0.0
u/s end Sac Weir	30.01	30.01	0.0	33.19	33.19	0.0
d/s end Sac Weir	30.58	30.58	0.0	33.54	33.54	0.0
u/s end of "The Rivers"	30.57	30.57	0.0	33.70	33.70	0.0
at I Street	30.31	30.31	0.0	33.53	33.53	0.0
at Freeport gage	23.82	23.82	0.0	26.72	26.72	0.0
at Snodgrass Slough	19.08	19.08	0.0	21.66	21.66	0.0
Yolo Bypass						
at Woodland gage	31.42	31.42	0.0	33.07	33.07	0.0
at Lisbon gage	24.14	24.14	0.0	26.04	26.04	0.0

[1] Cumulative development peak stage values are from Table 3 of the Corridor Report

II. Flow

Upstream of the city of Sacramento, flood flows are diverted off of the Sacramento River into the Yolo Bypass at the Freemont Weir and Sacramento Weir. Changes in the Sacramento River water surface elevation at the weirs will affect the amount of water being diverted. Under Project Condition 1, there were no impacts to the water surface elevation therefore, there would be no impacts to the flows at the weirs. For Project Condition 2; the addition of the Grupe project to the cumulative development components did not affect the water surface elevation. Thus, Table 4 and 5 of Section 5.2 of the Corridor Report would reflect the peak flow and impacts of Project Condition 2.

Conclusions:

Based on the hydraulic results:

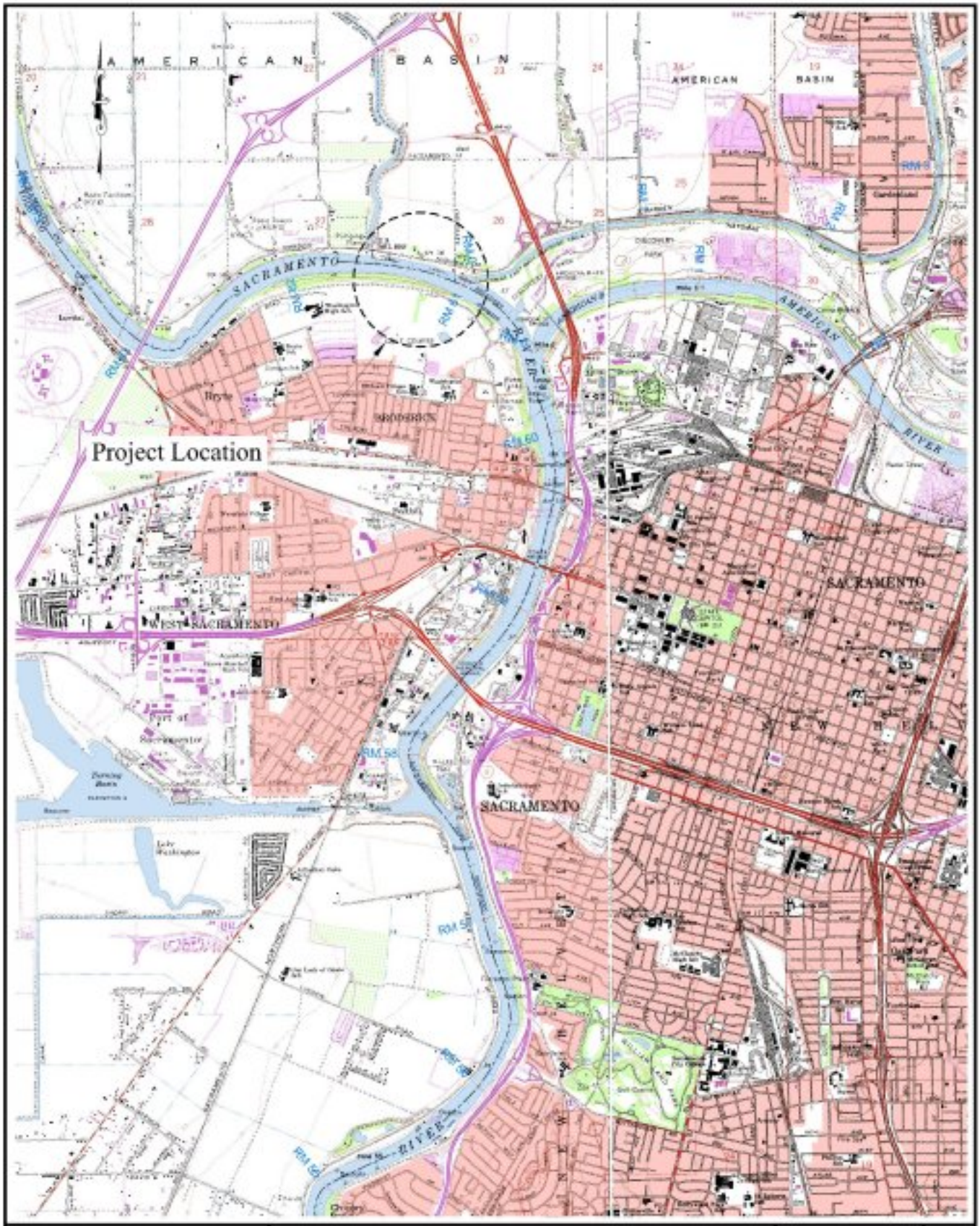
- Under Project Condition 1, there are no impacts to the water surface elevation and flows. The proposed project is located in the section of the river where the hydraulic gradient is flat thus any changes to the vegetation along this reach has minimal to no effect on the water surface elevation and flows.

- Under Project Condition 2, the addition of the proposed project to the cumulative development components did not change the results of the cumulative development analysis performed for the Forum and documented in the Corridor Report, see Table 2. Thus, the conclusions of the Corridor Report would not change. The Corridor Report concluded that there were water level changes on the order of 0.1 feet downstream of the Sacramento Weir and changes of 0.2 feet upstream of the Sacramento Weir. The Corridor Report found that by reducing new docks and removing new marinas upstream

of the Sacramento Weir, these water level impacts could be eliminated. The Corridor Report also concluded that enhancement of riparian vegetation does not impact the system flood capacity.

Don Trieu, P.E.

DT/ dt
The Rivers Hydraulic Analysis.doc



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The Rivers - Bank Stabilization Project

PROJECT LOCATION MAP

SHEET 1 OF 1 SHEETS

PLATE 1



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The Rivers - Bank Stabilization Project

SITE MAP

SCALE: 1" = 1000'
JOB NUMBER: 2004
DRAWN BY: MH
DATE: August 2005

SHEET 1 OF 1 SHEETS

PLATE 2

The Rivers

MBK Levee Typical Cross Section and Planting Configuration

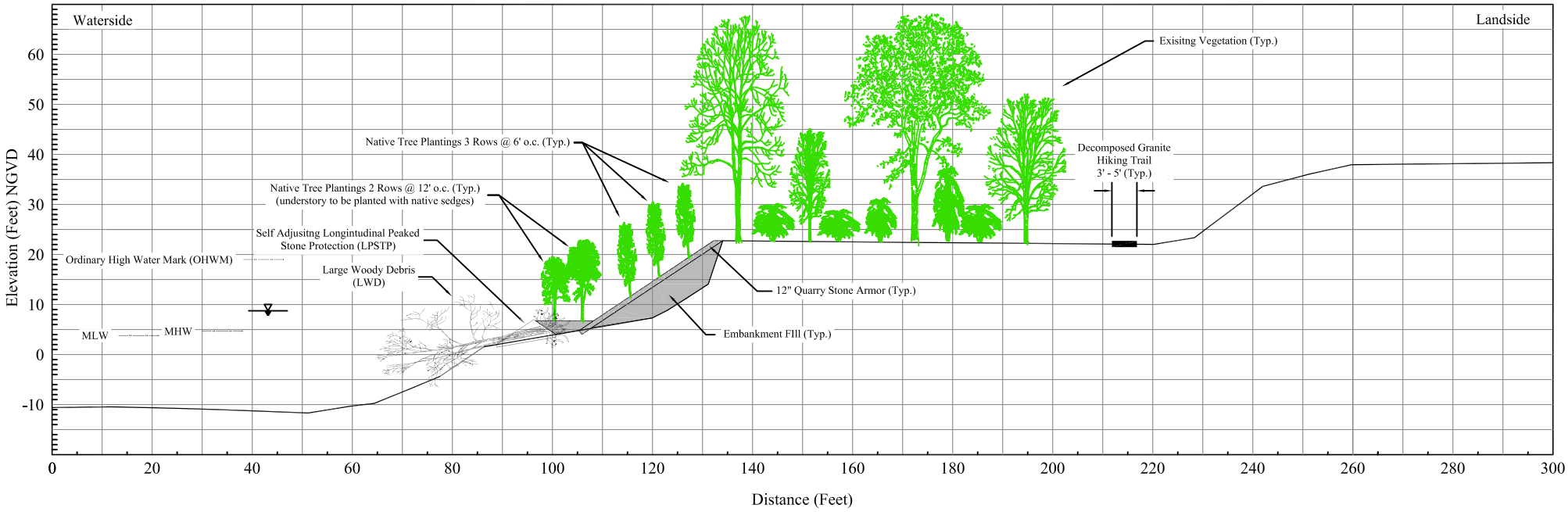

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PLATE 3

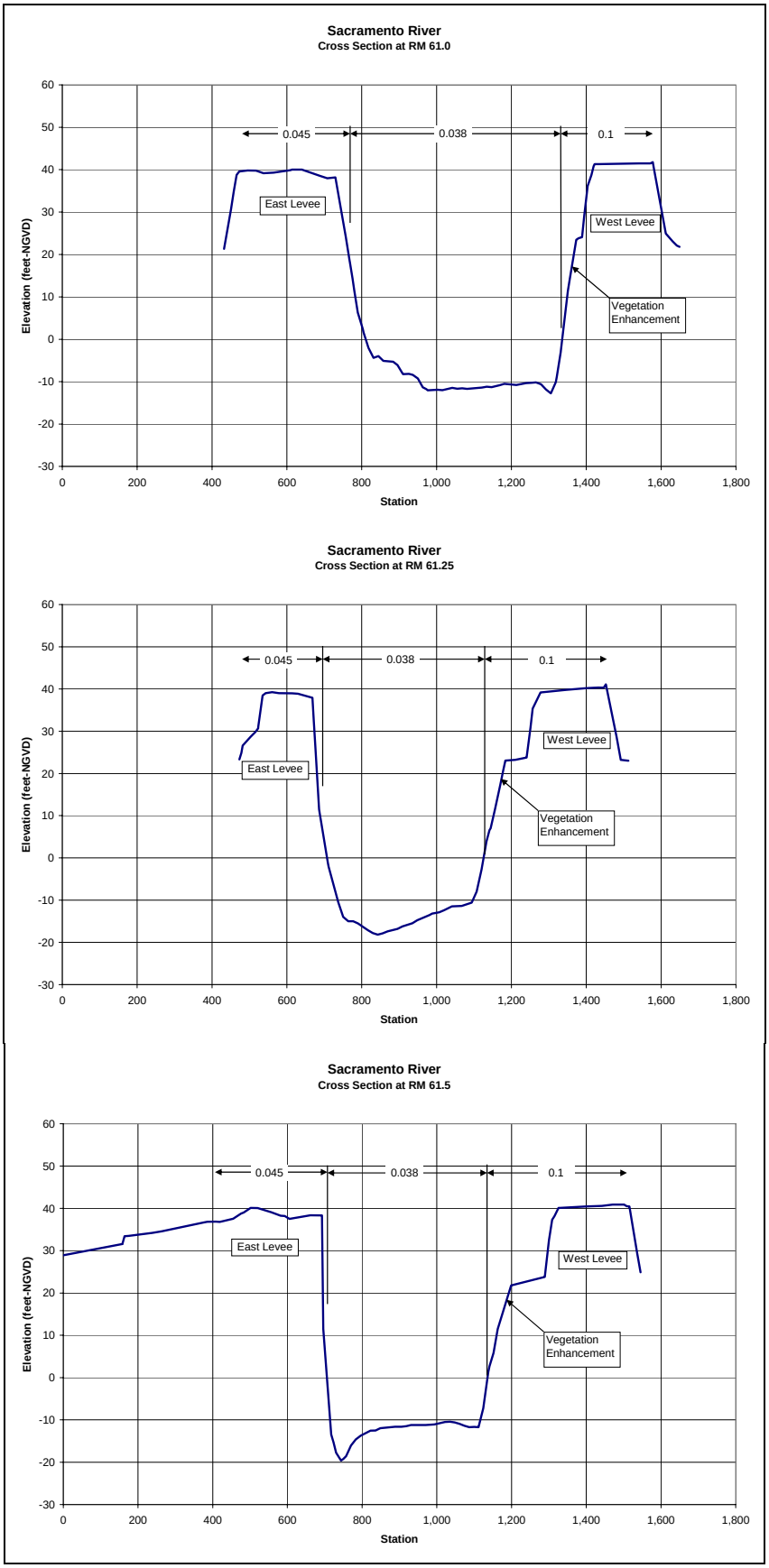
Sacramento River
Cross Section at RM 61.0
Elevation (feet-NGVD)
Station
0.045
0.038
0.1
East Levee
West Levee
Vegetation Enhancement
Sacramento River
Cross Section at RM 61.25
Elevation (feet-NGVD)
Station
0.045
0.038
0.1
East Levee
West Levee
Vegetation Enhancement
Sacramento River
Cross Section at RM 61.5
Elevation (feet-NGVD)
Station
0.045
0.038
0.1
East Levee
West Levee
Vegetation Enhancement

Plate 4

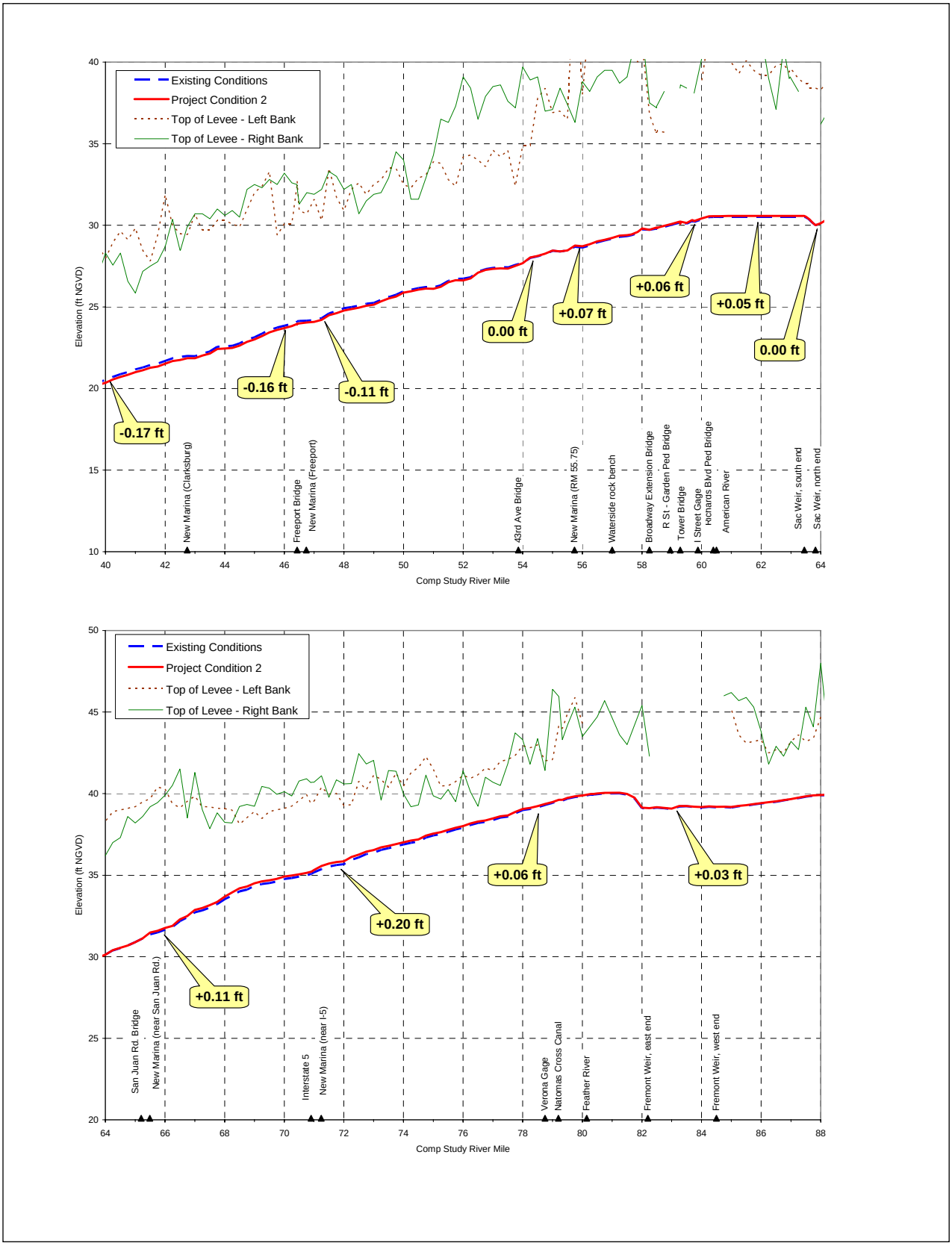

Figure 1: Project Condition 2 – January 1997 Flood Event; Sacramento River Maximum Water Surface Profile

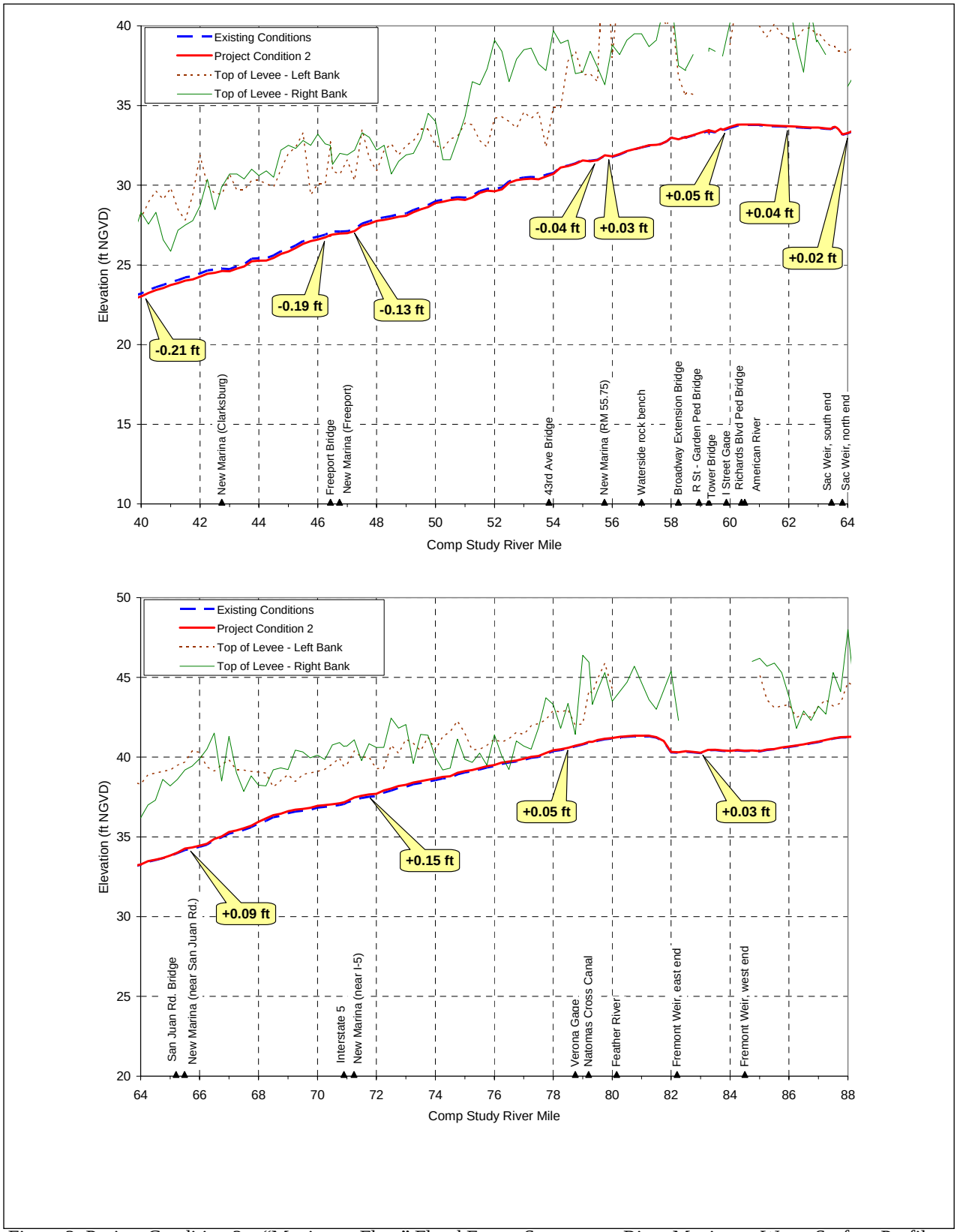

Figure 2: Project Condition 2 – "Maximum Flow" Flood Event; Sacramento River Maximum Water Surface Profile

Appendix I:
Hydraulic Impact of Cumulative Development in Sacramento River Corridor Floodway

Sacramento River Corridor
Floodway Planning Forum

HYDRAULIC IMPACT ANALYSIS OF CUMULATIVE DEVELOPMENT IN SACRAMENTO RIVER CORRIDOR FLOODWAY

Prepared for:
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June 27, 2005

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1 Introduction

This report discusses the hydraulic analysis of the impacts of potential cumulative development in the Sacramento River corridor floodway between Verona and Courtland on flood stages and flows.

2 Simulation Model

The impact analysis was done using a modified version of the Sacramento River basin UNET[1] model that was developed by the U.S. Army Corps of Engineers (Corps) for the Sacramento and San Joaquin River Basins Comprehensive Study (Comp Study). The model was modified and re-calibrated as documented in "Modifications, Refinements and Re-Calibration of the Sacramento and San Joaquin River Basins Comprehensive Study Sacramento Basin UNET Model", MBK Engineers, June 2003 (see Appendix A).

The Sacramento River basin UNET model, which was calibrated to the January 1997 flood event, includes the following river reaches, along with numerous tributaries to these rivers:

- Sacramento River from Woodson Bridge (RM 218) to Collinsville (RM 0)
- Feather River below Thermalito (RM 58.5)
- Yuba River below Englebright Reservoir (RM 22)
- Bear River below Wheatland (RM 12.5)
- Sutter Bypass
- American River below Folsom Lake (RM 22)
- Yolo Bypass

3 Cumulative Development Components

The study area for the cumulative conditions hydraulic analysis was the Sacramento River from the Fremont Weir to just below Courtland as shown in Figure 1. The cumulative development components included in the analysis are listed below.

- New bridges
- Addition of dense private docks, fishing piers and water-side rock bench armoring.
- New marina complexes.
- Riparian vegetation enhancement.

Detailed descriptions of the components included in the hydraulic model and how they were modeled are provided in the following sections.

[1] UNET is a one-dimensional unsteady open-channel flow computer model that can simulate flow in complex networks of interconnected channels.

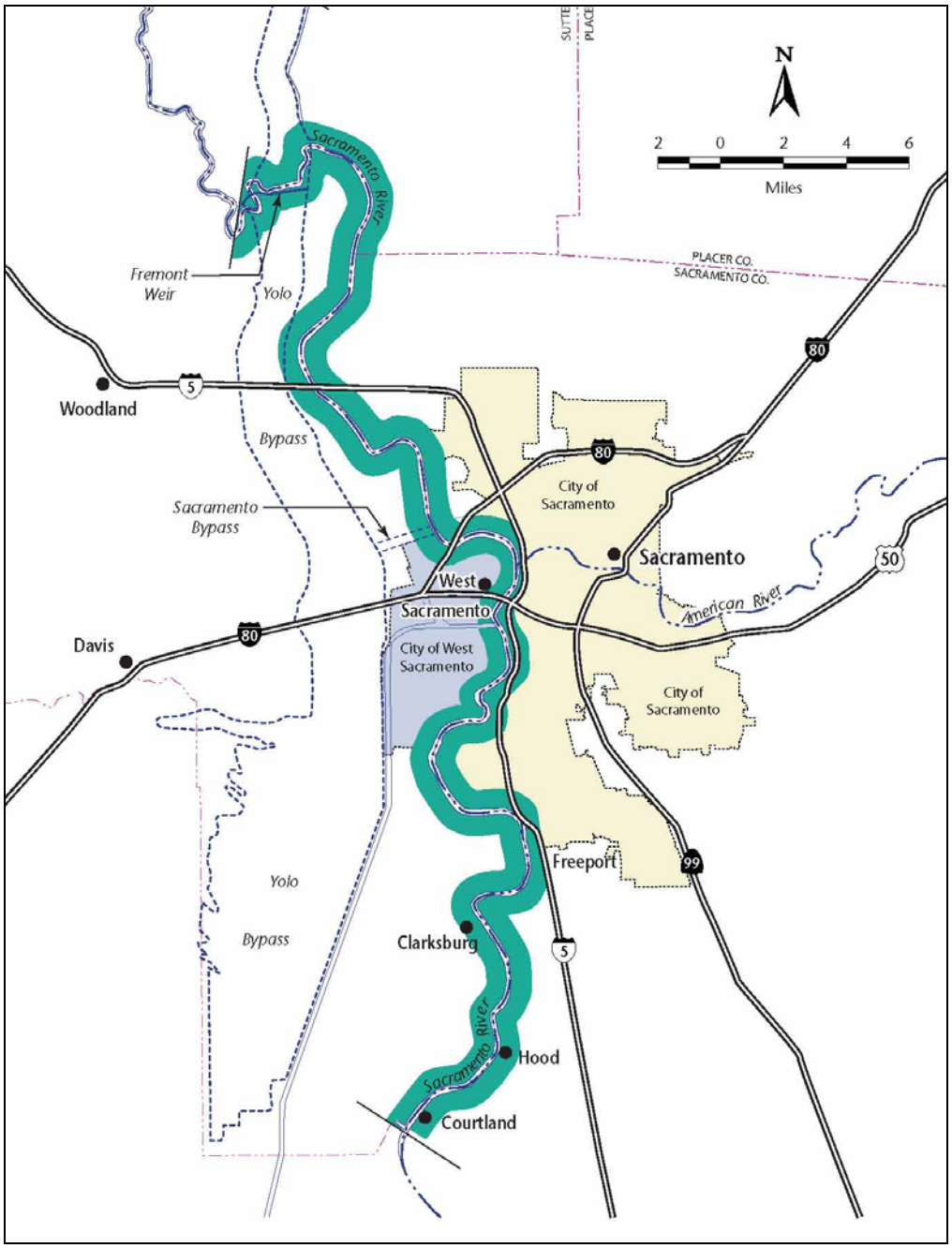

Figure 1. Sacramento River Corridor Planning Forum Study Area (Source: Jones & Stokes)

3.1 New Bridges

Five new bridges were included in the cumulative conditions hydraulic analysis, as listed below and shown in Figure 2.

1. San Juan Road bridge
2. Richards Boulevard pedestrian bridge
3. R Street pedestrian bridge
4. Broadway Extension bridge
5. 43rd Avenue bridge

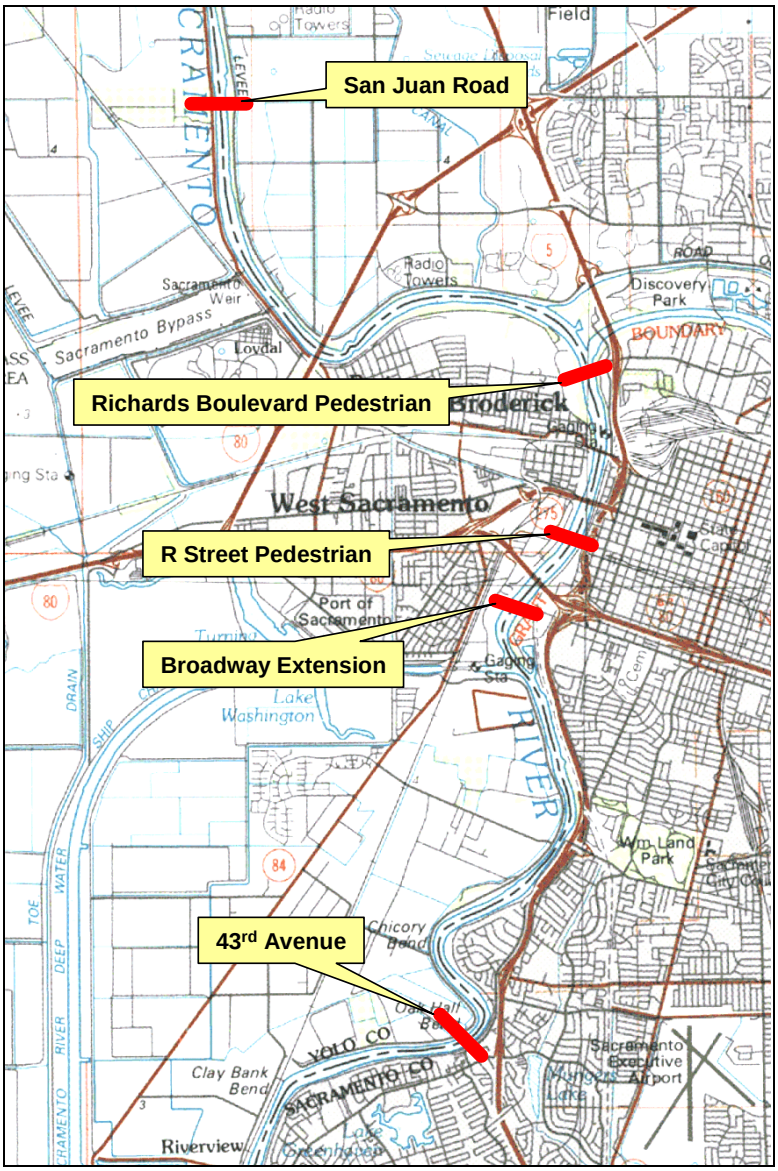

Figure 2. New Bridges

Conceptual drawing of the Richards Boulevard pedestrian bridge, R Street to Garden pedestrian bridge and Broadway Extension bridge were included in the Sacramento Riverfront Master Plan, July 2003 (see Figures 4, 6 and 8). The modeling of these bridges was based on the conceptual drawings. The San Juan Road bridge and 43rd Avenue bridge were modeled similar to the Broadway Extension bridge.

3.1.1 San Juan Road Bridge

The San Juan Road bridge is located at Comp Study RM 65.20. The deck of the San Juan Road bridge was assumed to be 4 ft. deep with its bottom at the existing top of levee elevation. The two piers were assumed to be 15 ft. wide. Figure 3 shows the San Juan Road bridge as modeled.

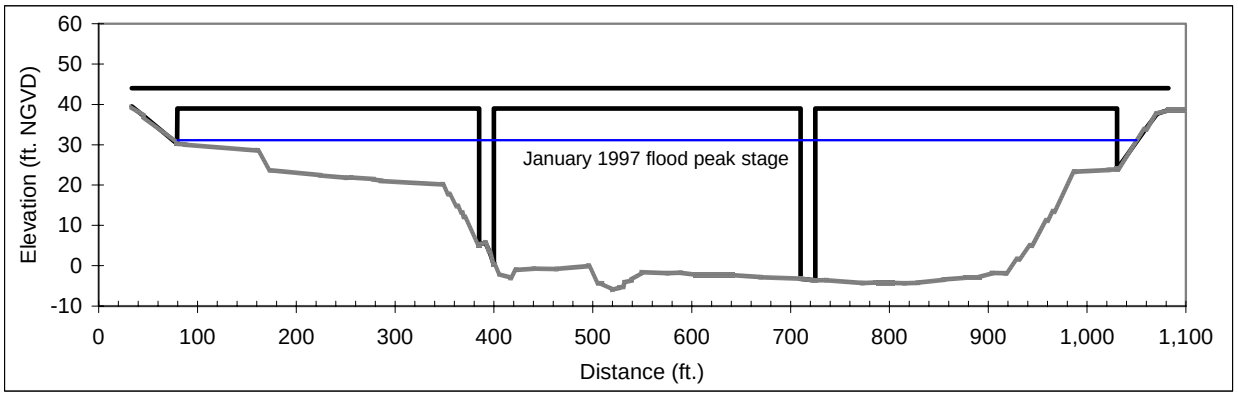

Figure 3. San Juan Road Bridge in Model (looking downstream)

3.1.2 Richards Boulevard Pedestrian Bridge

The Richards Boulevard pedestrian bridge is located immediately downstream of the confluence of the Sacramento River and American River at Comp Study RM 60.40. The deck of the Richards Boulevard pedestrian bridge was assumed to be 4 ft. deep with its top at the existing ground elevation. The two piers were assumed to be 15 ft. wide. Figure 4 shows the conceptual drawing from the Master Plan and Figure 5 shows bridge as modeled.



Figure 4. Concept Drawing of Richards Boulevard Pedestrian Bridge

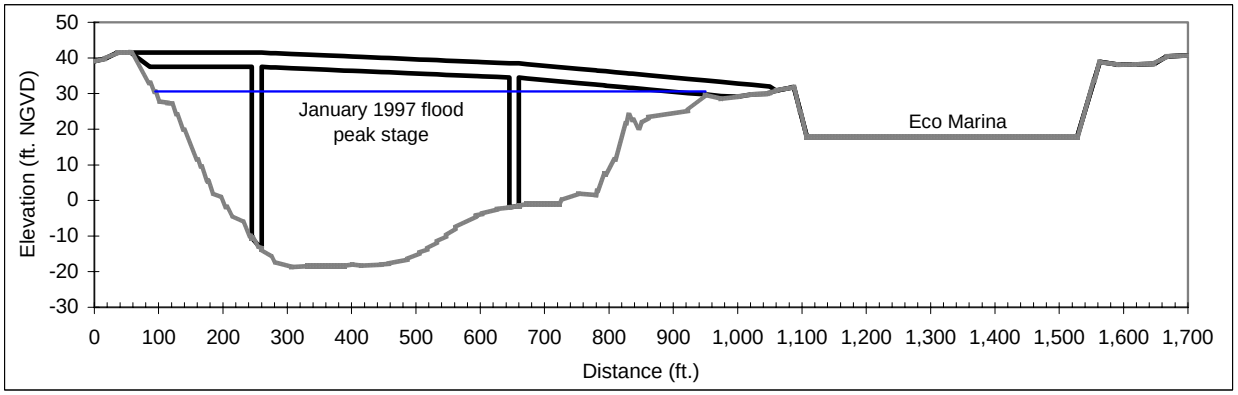

Figure 5. Richards Boulevard Pedestrian Bridge in Model (looking downstream)

3.1.3 R Street Pedestrian Bridge

The R Street pedestrian bridge is located at Comp Study RM 58.94, about one-third of a mile downstream of the Tower Bridge. The bridge deck was assumed to be 4 ft. deep and the two piers were assumed to be 20 ft. wide. The top of the bridge deck was assumed to be at the existing top of levee elevation. The abutments were assumed to encroach on the riverbank starting at about elevation 6 ft. NGVD. Figure 6 shows the conceptual drawing from the Master Plan and Figure 7 shows bridge as modeled.



Figure 6. Concept Drawing of R Street Pedestrian Bridge

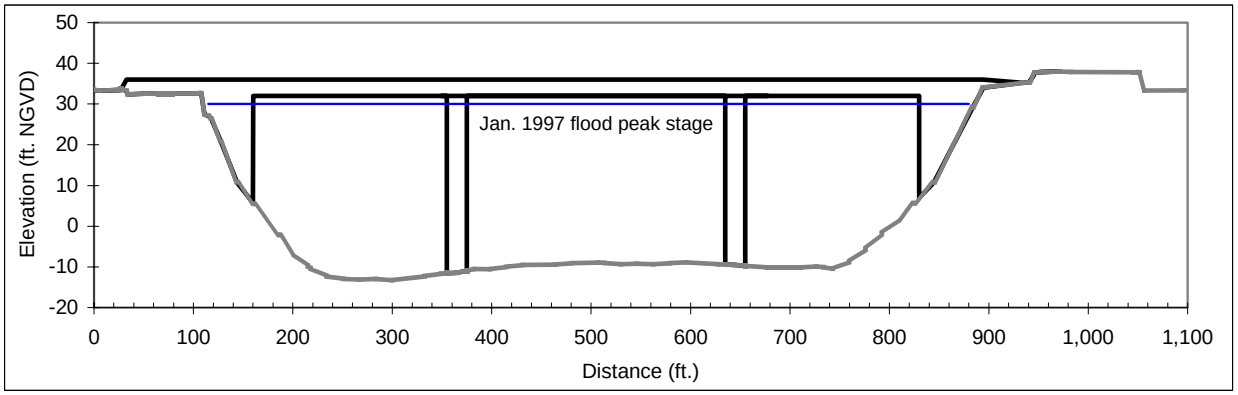

Figure 7. R Street Pedestrian Bridge in Model (looking downstream)

3.1.4 Broadway Extension Bridge

The Broadway Extension bridge is located at Comp Study RM 58.25, about one-quarter of a mile downstream of the Pioneer Bridge (Business 80). The deck of the Broadway Extension bridge was assumed to be 4 ft. deep with its bottom at the existing ground elevation. The two piers were assumed to be 15 ft. wide. Figure 8 shows the conceptual drawing from the Master Plan and Figure 9 shows bridge as modeled. The abutments were assumed to encroach on the riverbank starting at about elevation 8 ft. NGVD.

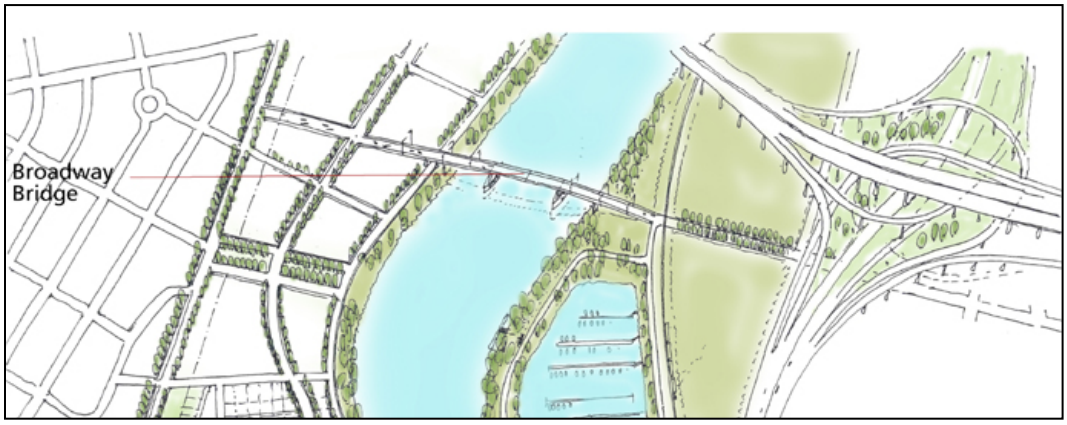

Figure 8. Concept Drawing of Broadway Extension Bridge

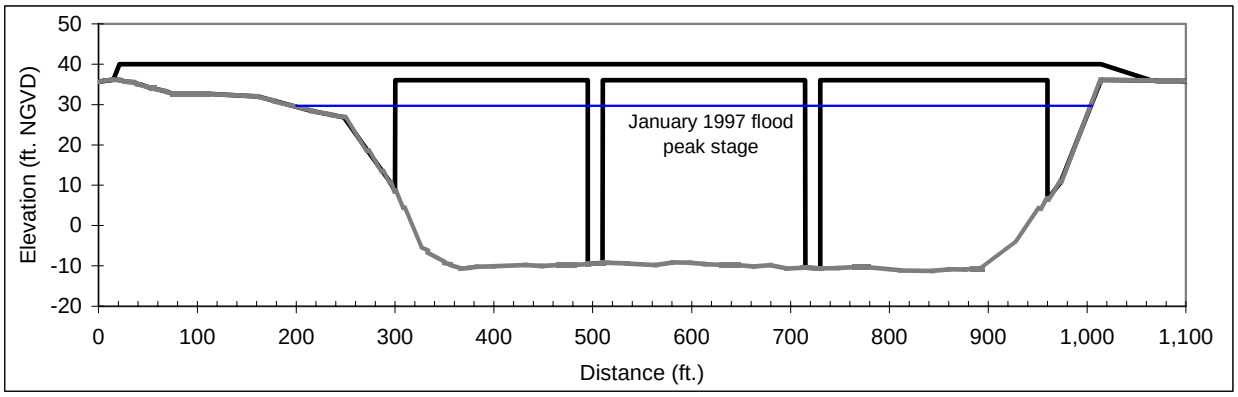

Figure 9. Broadway Extension Bridge in Model (looking downstream)

3.1.5 43rd Avenue Bridge

The 43rd Avenue bridge is located at Comp Study RM 53.85. The bridge deck was assumed to be 4 ft. deep with its bottom at the existing ground elevation. The two piers were assumed to be 15 ft. wide. Figure 10 shows the bridge as modeled. The abutments were assumed to encroach on the riverbank starting at about elevation 5 ft. NGVD on the left bank and 10 ft. NGVD on the right bank.

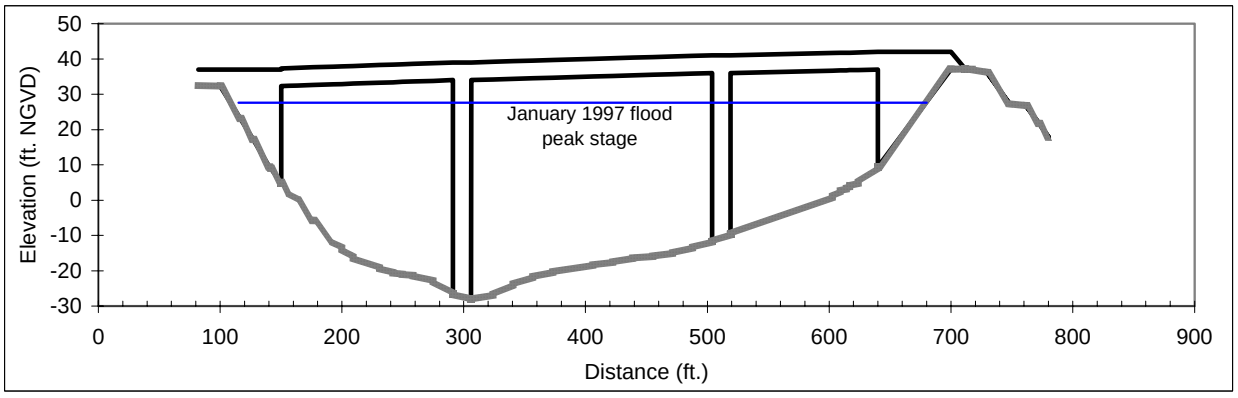

Figure 10. 43rd Avenue Bridge in Model (looking downstream)

3.2 Private Docks, Fishing Piers and Rock Bench Armoring

The cumulative development hydraulic impact analysis included the addition of private boat docks on the east side of the Sacramento River in the Natomas and Pocket areas as shown in Figure 11. It also included the addition of fishing piers and other public access related riverbank development in West Sacramento between the Lighthouse Marina and Pioneer Bridge.

Not only would it be difficult, if not impossible, to adequately model the individual docks and piers, but the number and density of the additional docks and piers is unknown. It would also be desirable to account for the effects of potential debris buildup on the docks and piers. Due to these unknowns and difficulties, the ultra-conservative assumption was made that they would create a continuous blockage in the river throughout the noted reaches. The size of the blockage was based on a review of existing private docks on the Sacramento River. It was assumed that the top of the blockage was at the elevation of the natural bank break-line and that it extended into the river for a distance of 80 feet, as shown in Figure 11. This blockage was included on all cross-sections in the subject reaches, as summarized in Table 1, effectively modeling a continuous blockage.

Table 1. Locations of Private Docks and Fishing Piers

Location	Comp Study River Miles
Natomas Area, East Side (Left Bank)	68.00 to 63.25
West Sacramento, West Side (Right Bank)	61.00 to 58.60
Pocket Area, East Side (Left Bank)	54.00 to 47.75

Another type of encroachment on the river bank is that due to rock bench armoring that may be added for erosion control. One example of rock bench armoring has been included in the cumulative analysis at river mile 57.00, the site of an actual rock bench armoring project being undertaken by the Corps of Engineers (see Figure 13). The dimensions of the rock bench armoring were based on the plans for the existing project. Figure 14 shows a model cross-section with this rock bench included. The rock bench was assumed to extend down the river bank for one-quarter of a mile.

It is likely that additional rock bench armoring projects will be necessary in the Sacramento River corridor floodway. Since the blockage incorporated into the model to represent private docks and fishing piers exceeds that of potential rock bench armoring projects, the potential impacts of any additional rock bench armoring projects is accounted for.

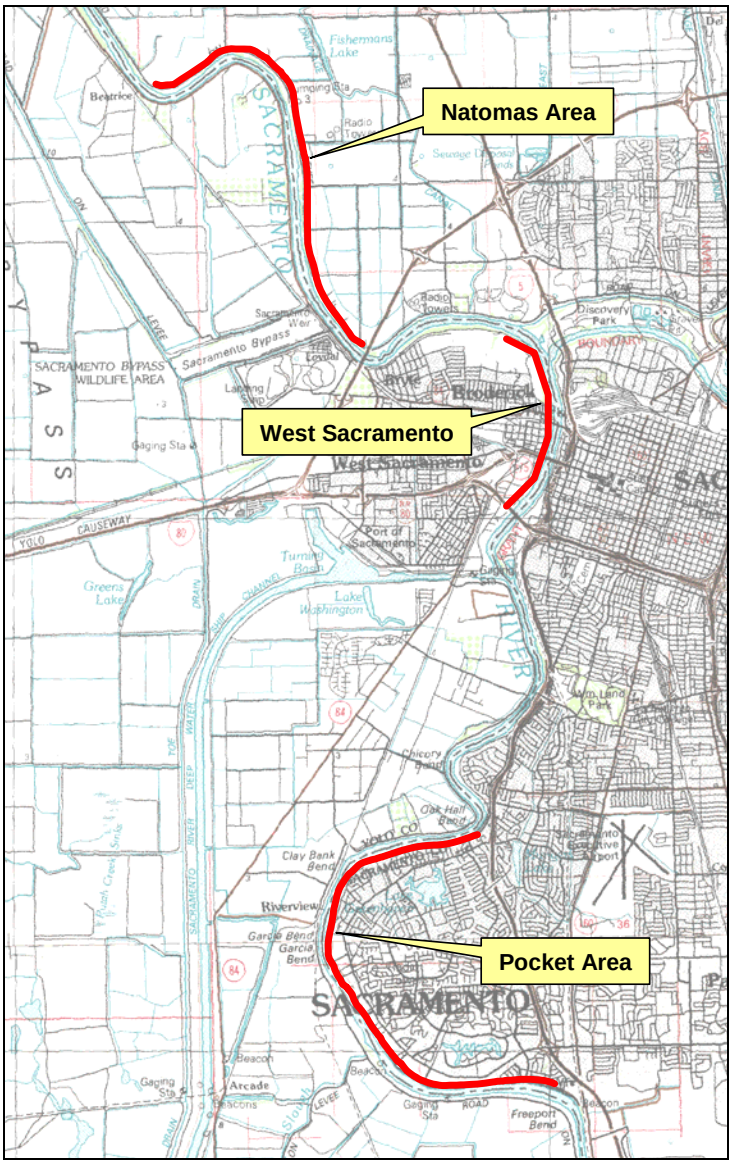

Figure 11. Locations of Private Docks and Fishing Piers in Model

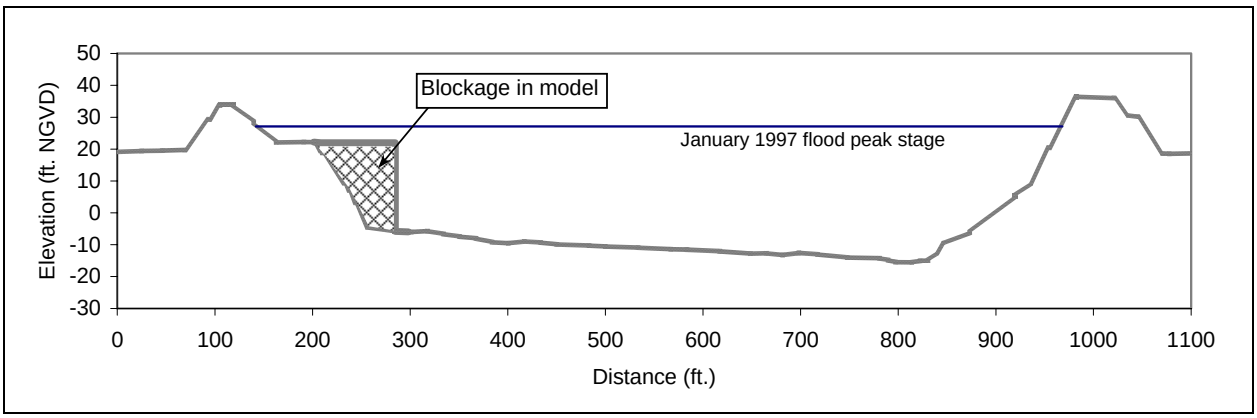

Figure 12. Typical Cross-section with Modeled Blockage for Private Docks and Fishing Piers

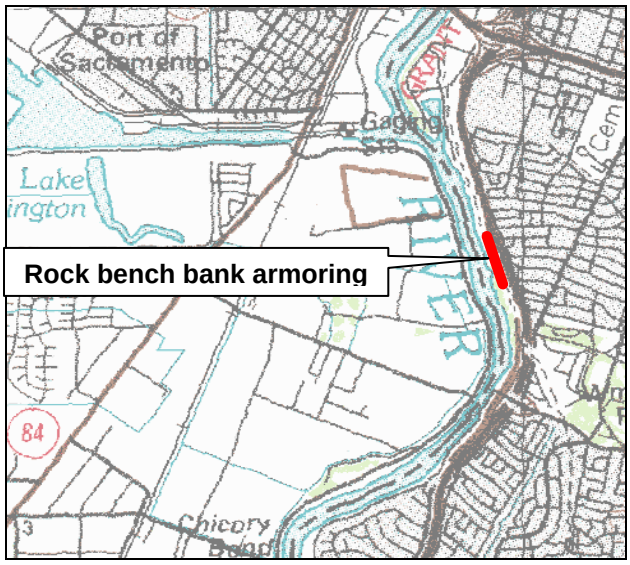

Figure 13. Location of Rock Bench Bank Armoring

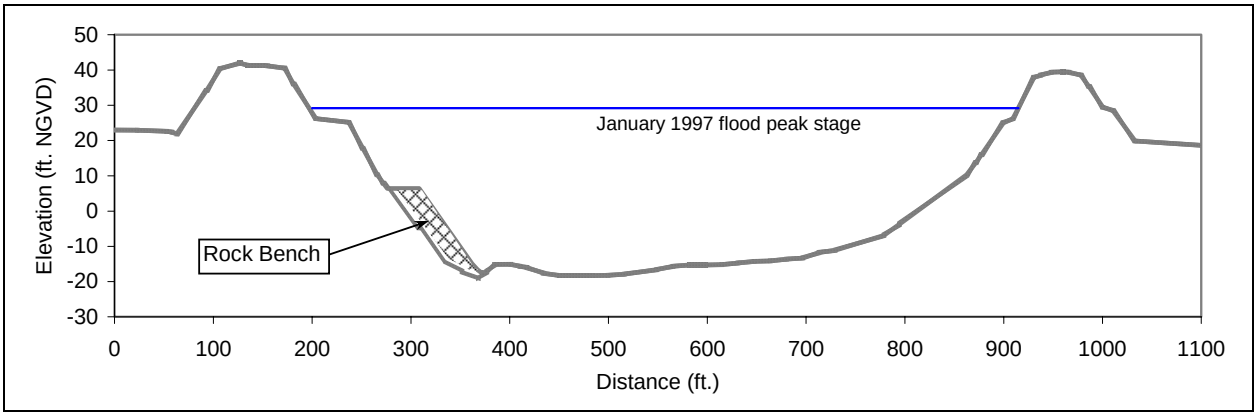

Figure 14. Cross-section with Modeled Rock Bench Bank Armoring

3.3 New Marina Complexes

The cumulative impact analysis assumed the addition of five new marina complexes as shown in Figure 15 and listed in Table 2.

Table 2. New Marina Complexes

Name	Location Details
Near I-5	On east side (left bank) immediately upstream of I-5. River mile 71.25.
Near San Juan Road	On west side (right bank). River mile 65.50.
At RM 55.75	On west side (right bank). River mile 55.75.
Near Freeport	On east side (left bank). River mile 46.75.
Near Clarksburg	On west side (right bank). River mile 42.75.

The dimensions of the new marinas were based on review of existing Sacramento River marinas, two of which are shown in Figure 16. The new marinas were assumed to have a length of about 1,200 feet and to extend about one-third of the way across the river channel. Since marinas are generally made up of floating structures that rise and fall with the river, they are difficult to physically model in UNET. However, since the primary hydraulic effect of a marina is to increase the drag due to the floating structure, anchoring piers and potential debris,

they can be represented in the UNET model through the use of increased roughness coefficients. In the cumulative development model the new marinas are modeled by increasing the roughness coefficient (n-value) at the marina location to 0.10 as shown in Figure 17. This represents an increase of 160% to 270% in the river channel and of 100% to 120% on the river bank.

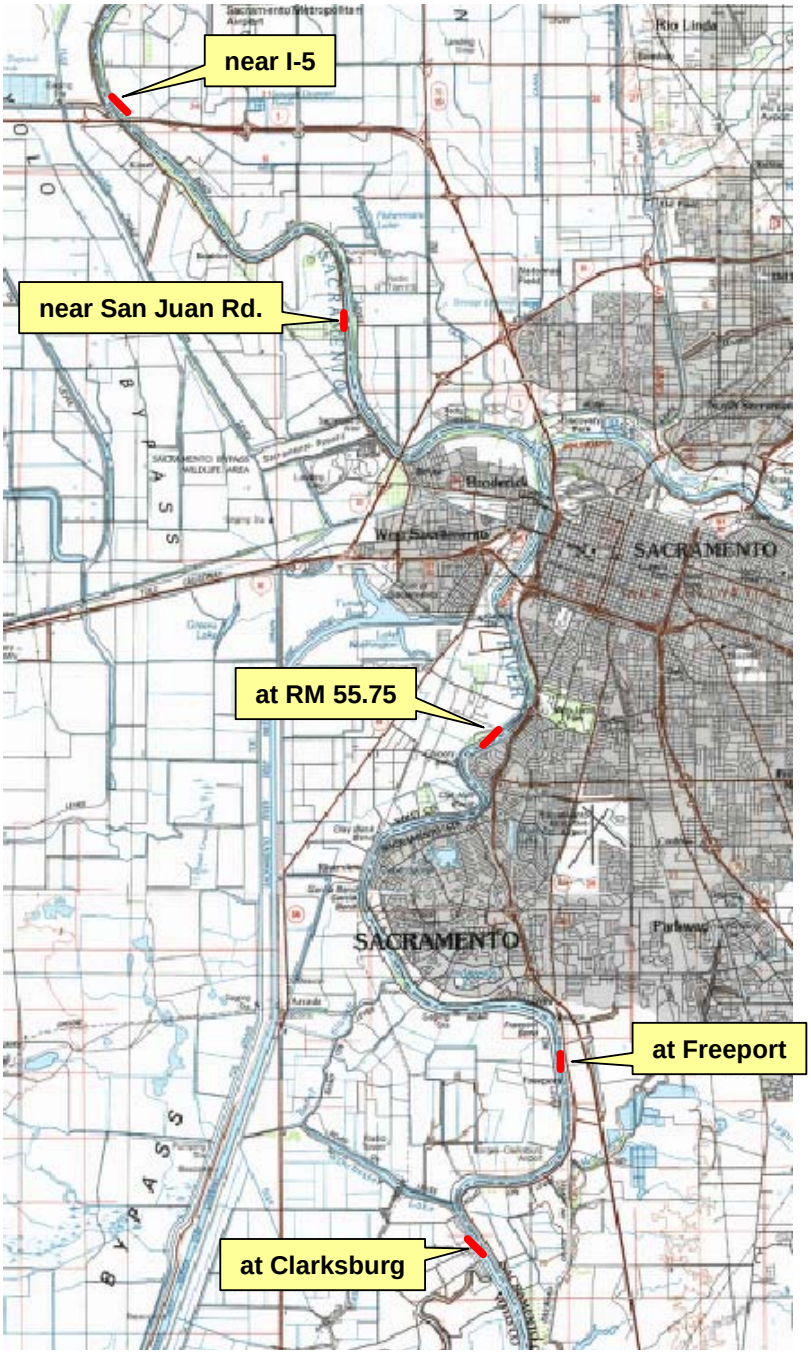

Figure 15. Locations of Marina Complexes in Model

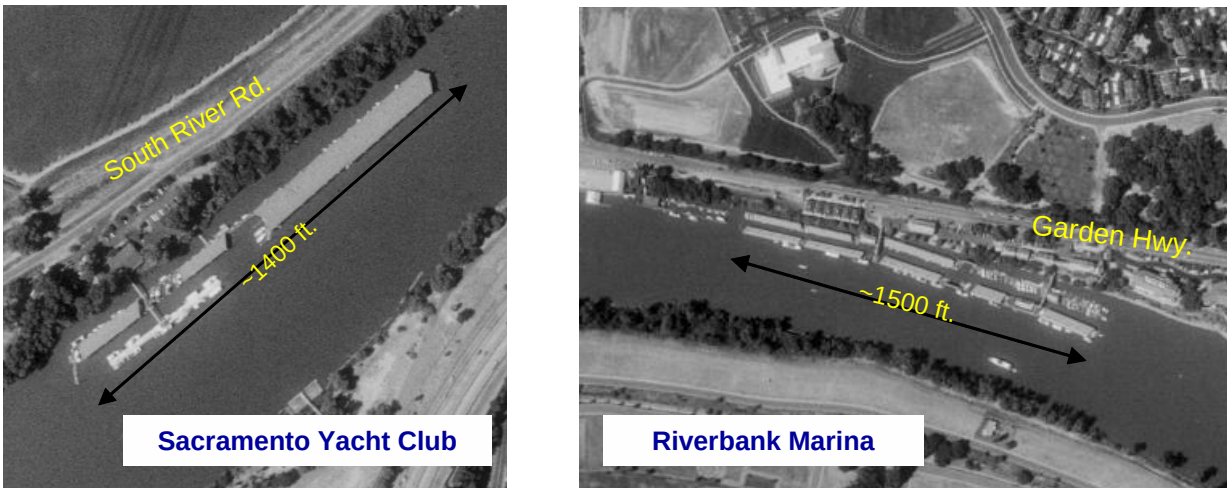

Figure 16. Sample Marina Complexes

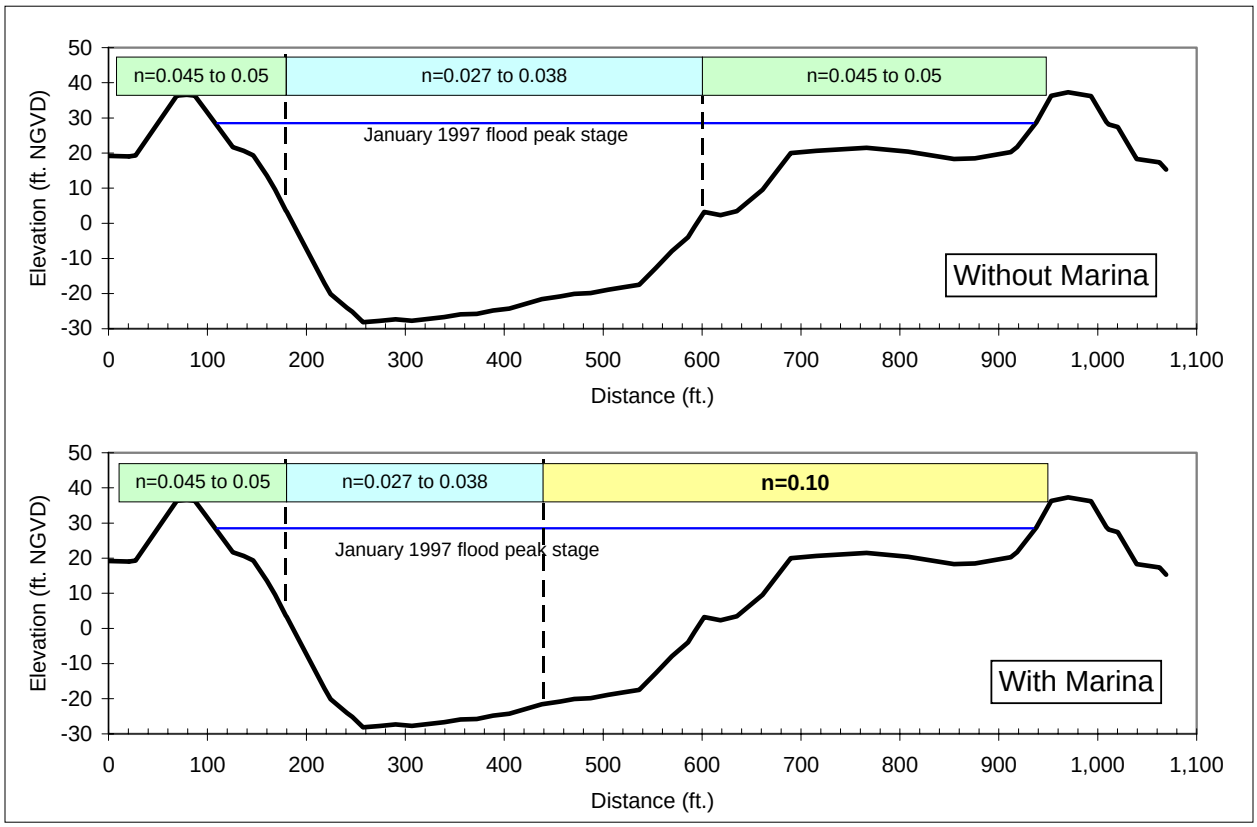

Figure 17. Cross-sections Showing Modeling of Marina Complex (looking downstream)

3.4 Riparian Vegetation Enhancement

The cumulative development analysis included riparian vegetation enhancement based upon information available in the Sacramento Riverfront Master Plan. The vegetation enhancement was modeled through the use of increased roughness coefficients. The reaches affected by the vegetation enhancement and the modifications made to the roughness coefficients are shown in Figure 18. A typical model cross-section showing how this increase was applied in the UNET model is shown in Figure 19.

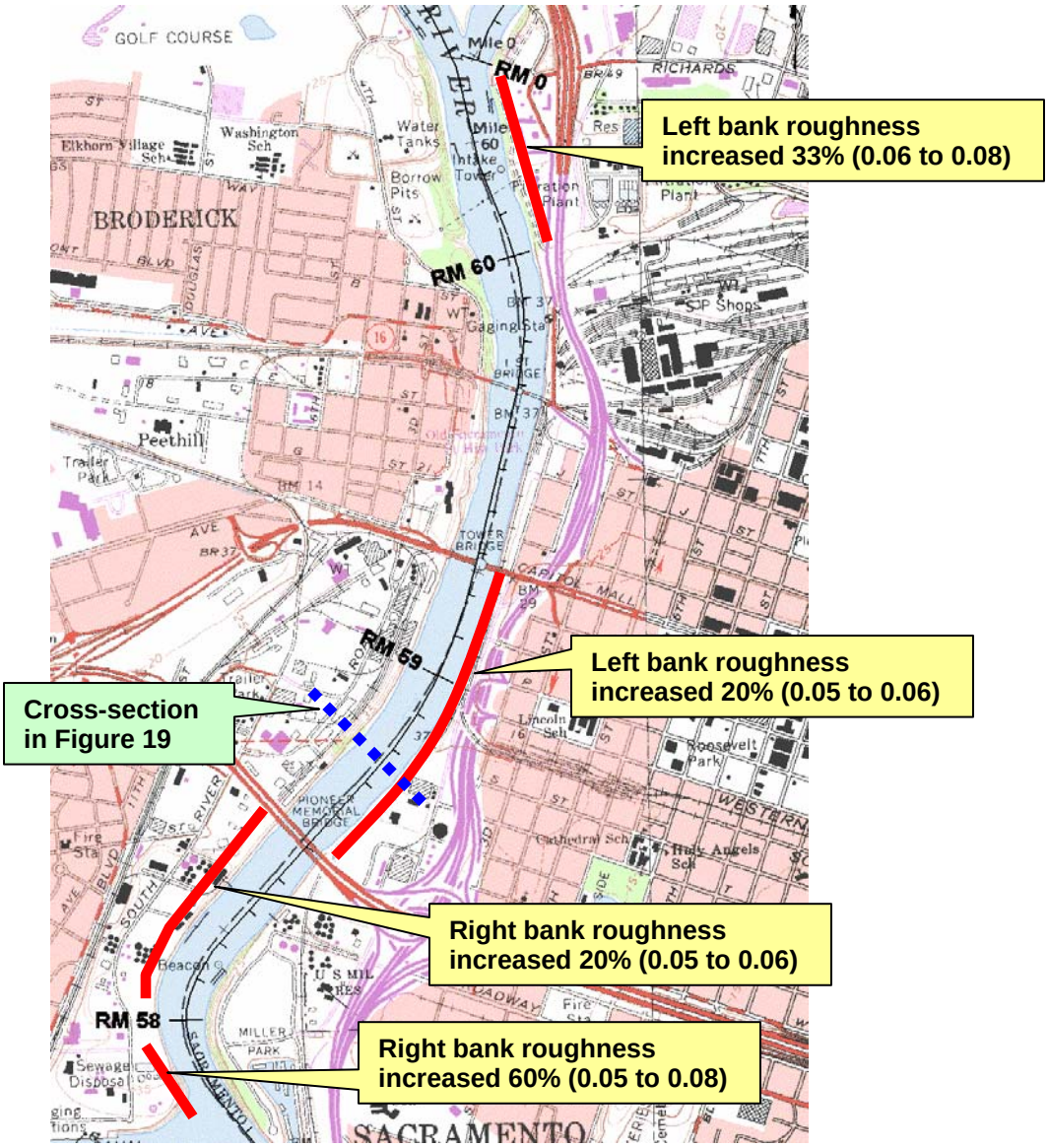

Figure 18. Riparian Vegetation Enhancement in Model

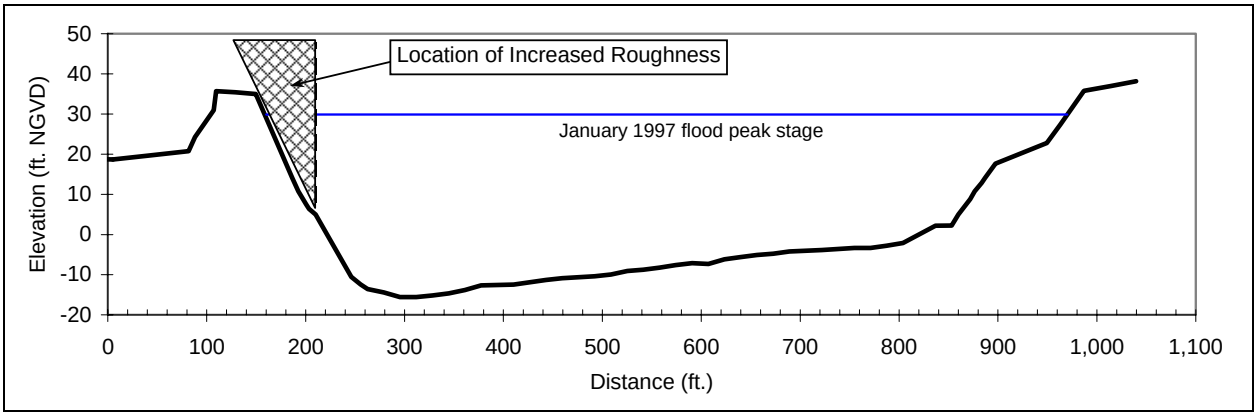

Figure 19. Sample Cross-section with Riparian Vegetation Enhancement (looking downstream)

4 Hydrology

As part of the Comp Study, the Corps developed a hydrologic data set for the Sacramento River Basin UNET model. The hydrologic data set includes flow data for the UNET model upstream boundaries for flood events with 2, 10, 25, 50, 100, 200 and 500-year return frequencies that were developed from the following 11 hypothetical storm centerings:

- Ord Ferry (Sacramento River mainstem at latitude of Ord Ferry)
- Sacramento (Sacramento River mainstem at latitude of Sacramento)
- Stony Creek
- Shasta
- Butte Creek
- Oroville
- Yuba River
- Bear River
- American River
- Cache and Putah Creeks
- Delta

The hydrology used for this analysis was the Sacramento centering, which was developed to place the most stress on the system at the latitude of Sacramento.

Impacts of the cumulative development were determined for two flood events:

1. January 1997 Flood
2. "Maximum Flow" flood event. This event is modeled using the 1 in 100 AEP flood event on the Sacramento River basin with the 1 in 200 AEP flood event on the American River. The flow data used was from the Sacramento Centering hydrology developed by the Corps for the Comp Study. The "Maximum Flow" flood event simulation used a system-wide assumption that levees would overtop but would not fail. This combination of events and levee assumptions represents a maximum flow condition for the urban center from the Sacramento Weir downstream to Freeport.

5 Hydraulic Analysis and Results

This section presents the impacts of the cumulative development as modeled on peak flows, water surface elevations, and velocities in the affected areas.

5.1 Water Surface Elevation

5.1.1 January 1997 Flood Simulation

Plots of the Sacramento River maximum water surface January 1997 flood simulation profiles for with and without cumulative development are provided in Figure 20. The impacts of the cumulative development at various locations are highlighted on the profile plots. A summary table of maximum water surface elevations and corresponding cumulative development impacts is provided in Table 3. The maximum water surface elevation increase due to the cumulative development is 0.20 feet just upstream of I-5. The impact downstream of the American River through the downtown Sacramento area ranges from +0.05 to +0.07 feet. From the Pocket area downstream the cumulative development results in a maximum water surface elevation

reduction. This reduction is the result of a flow reduction in the Sacramento River downstream of the American River due to slight increases in the diversions at the Fremont and Sacramento Weirs. The flow impacts are discussed in more detail in section 5.2. The amount of additional flow being diverted to the Yolo Bypass is small relative to total flow being diverted and results in a maximum impact to the Yolo Bypass water surface elevation of +0.03 feet.

5.1.2 "Maximum Flow" Flood Simulation

Plots of the Sacramento River maximum water surface "maximum flow" flood simulation profiles for with and without cumulative development are provided in Figure 21. The impacts of the cumulative development at various locations are highlighted on the profile plots. A summary table of maximum water surface elevations and corresponding cumulative development impacts is provided in Table 3. The maximum water surface elevation increase due to the cumulative development is 0.15 feet just upstream of I-5. The impact downstream of the American River through the downtown Sacramento area ranges from +0.03 to +0.05 feet. From the Pocket area downstream the cumulative development results in a maximum water surface elevation reduction. This reduction is the result of a flow reduction in the Sacramento River downstream of the American River due to slight increases in the diversions at the Fremont and Sacramento Weirs. The flow impacts are discussed in more detail in section 5.2. The amount of additional flow being diverted to the Yolo Bypass is small relative to total flow being diverted and results in a maximum impact to the Yolo Bypass water surface elevation of +0.02 feet.

Table 3. Peak Stages and Impacts

Location	January 1997 Flood Simulation			"Maximum Flow" Flood Simulation		
	Peak Stage (ft. NGVD)		Impact (ft.)	Peak Stage (ft. NGVD)		Impact (ft.)
	Existing	Cumulative Dev.		Existing	Cumulative Dev.	
Sacramento River						
u/s end Fremont Weir	39.16	39.19	+0.03	40.38	40.41	+0.03
d/s end Fremont Weir	39.08	39.11	+0.03	40.28	40.31	+0.03
at Verona gage	39.31	39.37	+0.06	40.67	40.72	+0.05
u/s I-5 Marina	35.37	35.57	+0.20	37.32	37.47	+0.15
u/s San Juan Rd. Marina	31.38	31.49	+0.11	34.18	34.27	+0.09
u/s end Sac Weir	30.01	30.01	0.00	33.17	33.19	+0.02
d/s end Sac Weir	30.53	30.58	+0.05	33.52	33.54	+0.02
at I Street	30.25	30.31	+0.06	33.48	33.53	+0.05
at Freeport gage	23.97	23.82	-0.15	26.90	26.72	-0.18
at Snodgrass Slough	19.24	19.08	-0.16	21.83	21.66	-0.17
Yolo Bypass						
at Woodland gage	31.39	31.42	+0.03	33.05	33.07	+0.02
at Lisbon gage	24.12	24.14	+0.02	26.02	26.04	+0.02

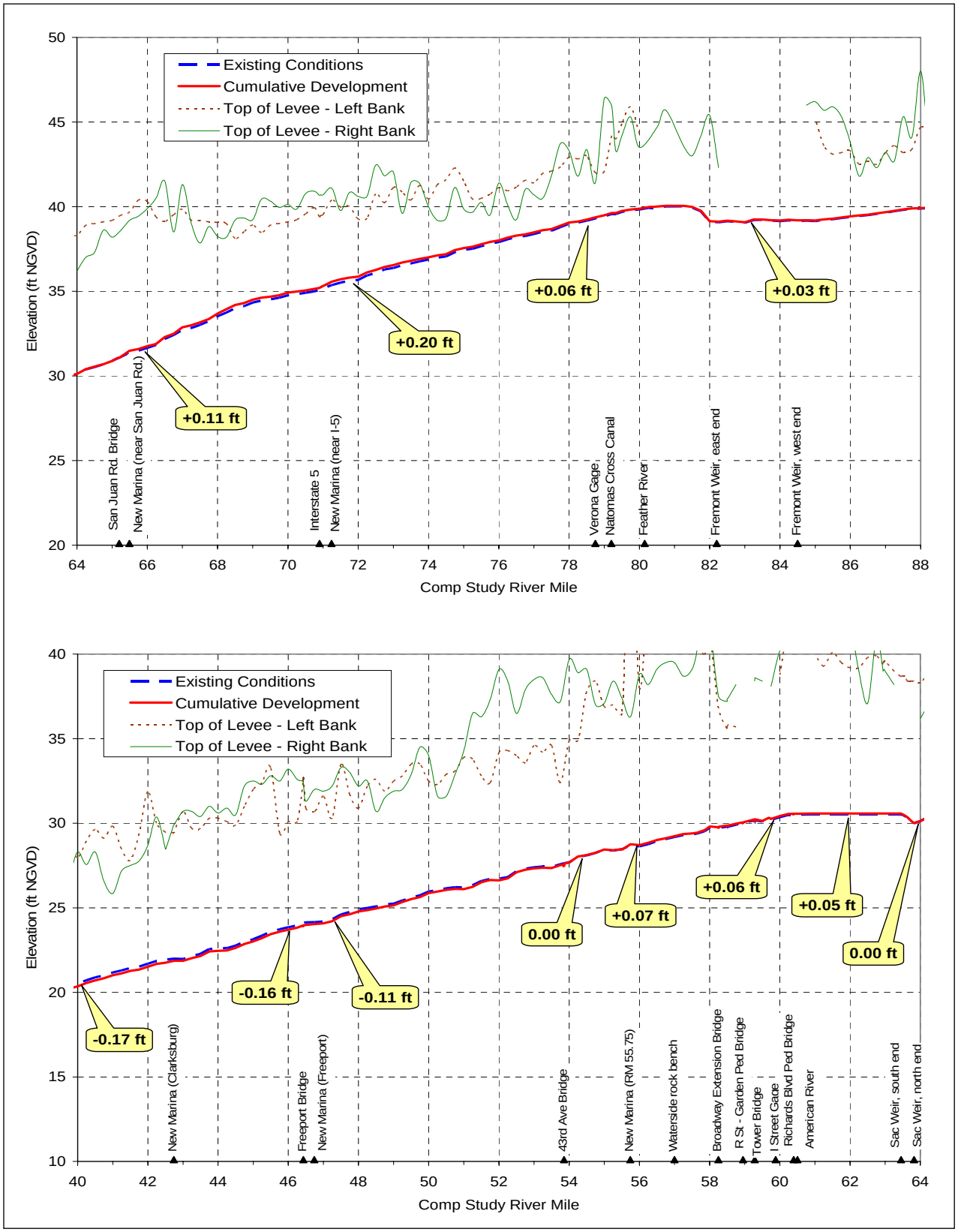

Figure 20. Sacramento River Maximum Water Surface Elevation Profile
January 1997 Flood Simulation

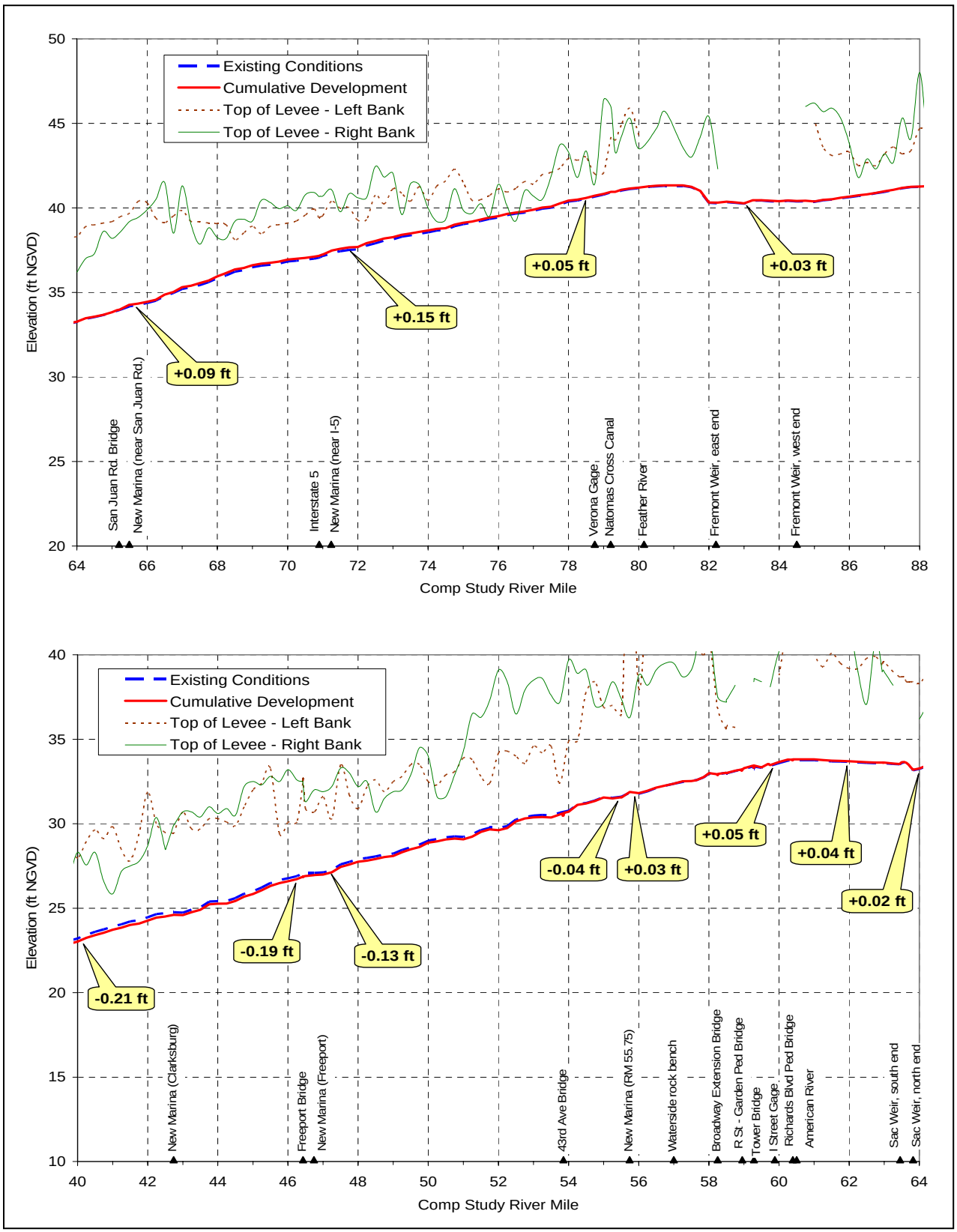

Figure 21. Sacramento River Maximum Water Surface Elevation Profile
"Maximum Flow" Flood Simulation

5.2 Flow

Upstream of the city of Sacramento flood flows are diverted off of the Sacramento River into the Yolo Bypass at the Fremont Weir and Sacramento Weir. Changes in the Sacramento River water surface elevation at the weirs will affect the amount of water being diverted. The effects of the cumulative development on peak flows are summarized in Table 4 and shown graphically In Figure 22. In the January 1997 flood simulation the cumulative development results in a peak flow increase in the Yolo Bypass at the latitude of Sacramento of 1,360 cfs with a corresponding decrease in the Sacramento River of 1,440 cfs. Since the additional flow in the Yolo Bypass is a much smaller percentage of the total (0.30%) as compared to the reduction on the Sacramento River (1.18%) the effect is more pronounced on the Sacramento River, as described in Section 5.1. In the "Maximum Flow" flood simulation the Yolo Bypass peak flow at the latitude of Sacramento increased by 1,510 cfs (0.27% of total) with a corresponding decrease in the Sacramento River of 1,900 cfs (1.34% of total). Table 5 summarizes the flow split between the Sacramento River and the Yolo Bypass at the latitude of Verona and at the latitude of Sacramento in terms of percent of total flow. As can be seen in Table 5, the flow splits are essentially unchanged.

Table 4. Peak Flows and Impacts

Location	January 1997 Flood Simulation				"Maximum Flow" Flood Simulation			
	Peak Flow (cfs)		Impact		Peak Flow (cfs)		Impact	
	Existing	Cumul. Dev.	(cfs)	% of Total Flow	Existing	Cumul. Dev.	(cfs)	% of Total Flow
Sacramento River								
At Verona gage	105,950	104,730	-1,220	-1.15%	109,110	108,020	-1,090	-1.00%
At I Street	122,070	120,630	-1,440	-1.18%	142,140	140,240	-1,900	-1.34%
Yolo Bypass								
d/s Fremont Weir	349,820	350,960	+1,140	+0.33%	389,300	390,220	+920	+0.24%
d/s Sac Bypass	449,990	451,350	+1,360	+0.30%	554,790	556,300	+1,510	+0.27%
Sacramento Bypass								
d/s Sac Weir	96,770	97,040	+270	+0.28%	149,690	150,280	+590	+0.39%

Table 5. Sacramento River and Yolo Bypass Flow Split

Location	January 1997 Flood Simulation				"Maximum Flow" Flood Simulation			
	Existing		Cumulative Dev.		Existing		Cumulative Dev.	
	Peak Flow (cfs)	% of Total Flow	Peak Flow (cfs)	% of Total Flow	Peak Flow (cfs)	% of Total Flow	Peak Flow (cfs)	% of Total Flow
Latitude of Verona								
Sacramento R at Verona Gage	105,950	23.2%	104,730	23.0%	109,110	21.9%	108,020	21.7%
Fremont Weir Spill	349,820	76.8%	350,960	77.0%	389,300	78.1%	390,220	78.3%
Total	455,770		455,690		498,410		498,240	
Latitude of Sacramento								
Sacramento R at I Street	122,070	21.3%	120,630	21.1%	142,140	20.4%	140240	20.1%
Yolo Bypass d/s Sacramento Bypass	449,990	78.7%	451,350	78.9%	554,790	79.6%	556,300	79.9%
Total	572,060		571,980		696,930		696,540	

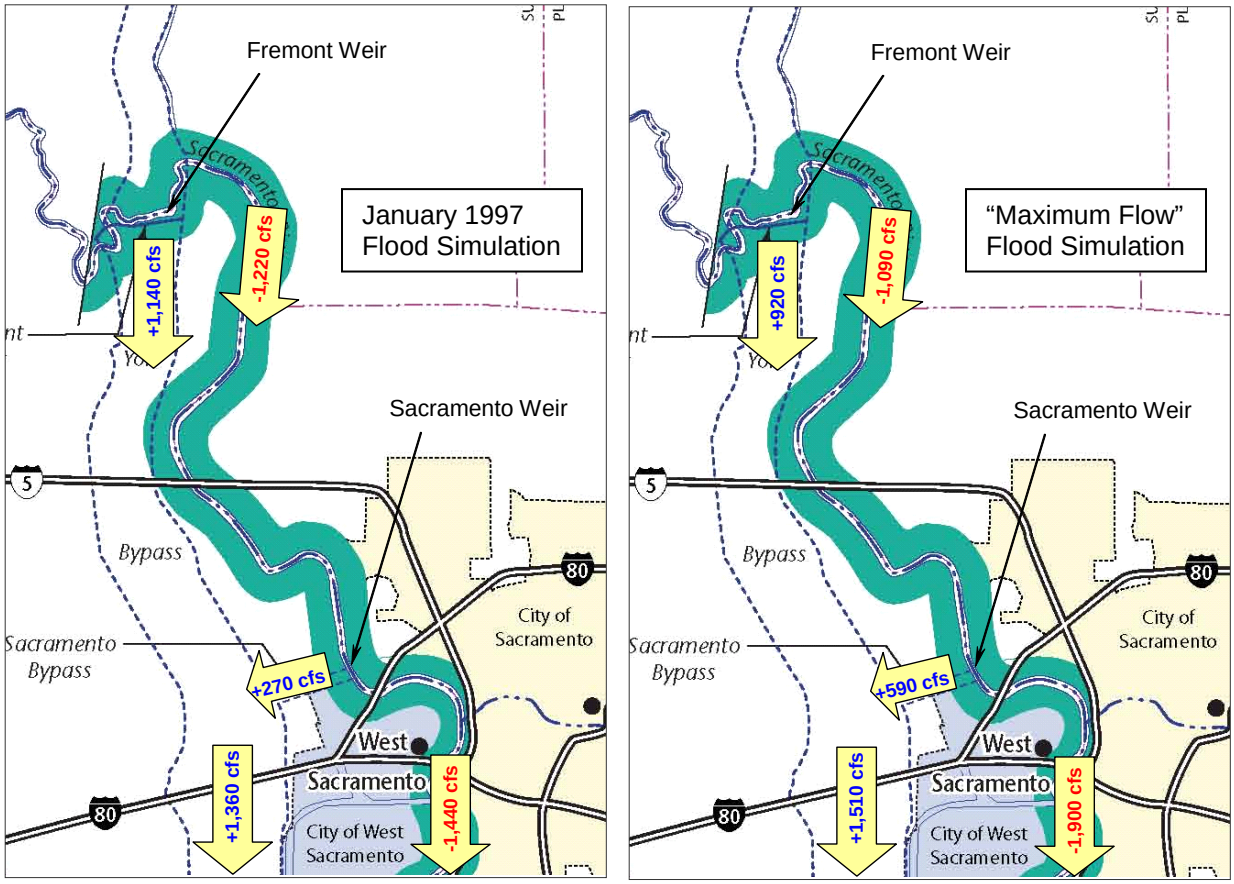

Figure 22. Cumulative Development Peak Flow Impacts

5.3 Velocity

UNET calculates the average velocity at each model cross-section. A summary table of the effects of the cumulative development on the computed maximum velocities is provided in Table 6. Profile plots of the maximum velocities in the Sacramento River between the Natomas Cross Canal and Snodgrass Slough for the January 1997 flood simulation and "Maximum Flow" flood simulation are provided in Figures 23 and 24, respectively.

Table 6. Computed Maximum Average Velocities, Sacramento River, Natomas Cross Canal to Sutter Slough

Simulation	Velocity Range (fps)	
	Existing Conditions	Cumulative Development
1997 Flood	2.58 to 6.45	2.53 to 7.00
"Maximum Flow" Flood	2.79 to 7.01	2.75 to 7.52

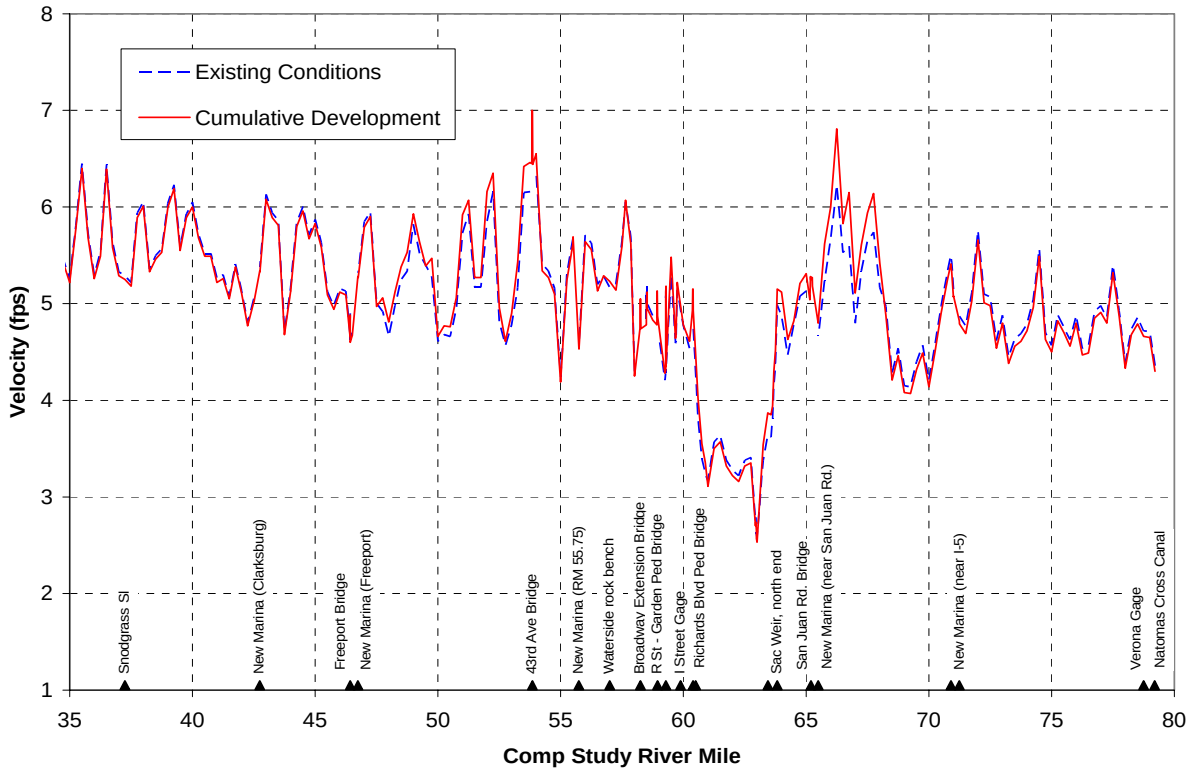

Figure 23. Maximum Velocity Profile for Sacramento River – January 1997 Flood Simulation

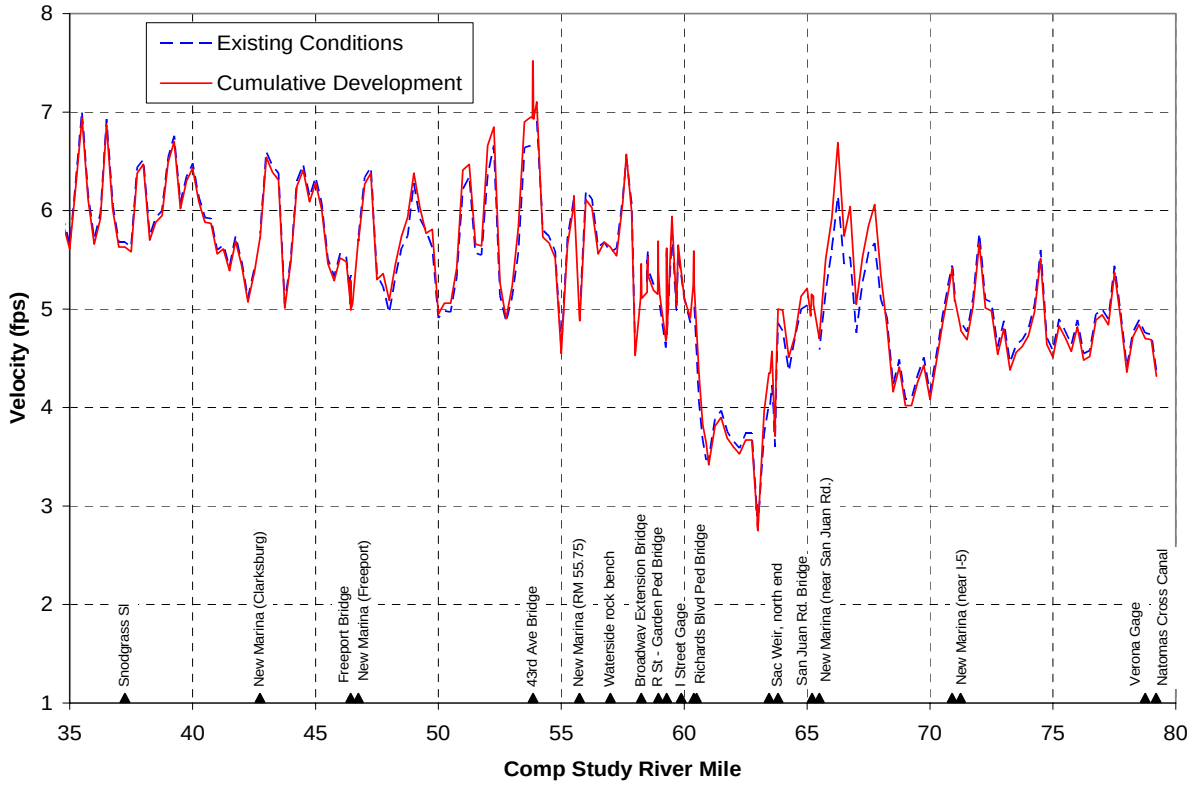

Figure 24. Maximum Velocity Profile for Sacramento River – "Maximum Flow" Flood Simulation

6 Supplemental Studies

As a result of the initial analysis two supplemental studies were performed. The location of the maximum impact from the initial analysis, upstream of the Sacramento Weir, coincides with an area of potential levee overtopping as shown in Figure 21. For this reason a study was made to minimize the impacts of the development components upstream of the Sacramento Weir. A study was also made to investigate the sensitivity of the bank roughness coefficients used in the initial analysis to represent the riparian vegetation enhancement (see Section 3.4).

6.1 Hydraulic Impacts of Development Upstream of Sacramento Weir

As noted in Sections 5.1.1 and 5.1.2 the maximum impact of the cumulative development occurs upstream of the Sacramento Weir near Interstate 5. The cumulative development components upstream of the Sacramento Weir were the San Juan Road bridge, the San Juan Road marina, the I-5 marina and dense dock encroachment between river miles 68.00 and 63.25. Two scenarios were modeled incorporating the following variations on the cumulative development scenario:

Alt. 1: Remove the San Juan Road marina and I-5 marina.

Alt. 2: Remove the San Juan Road marina and I-5 marina and remove the Natomas area dense docks but allow for rock bench bank protection.

The removal of the Natomas area dense docks with allowance for rock bench bank protection was modeled by reducing the elevation of the top of the blockage at each cross-section to 15 ft. NGVD as shown in Figure 25. The horizontal location of the encroachment was not changed, so the width of the top of encroachment is less than 80 ft and is dependent on the slope of the bank.

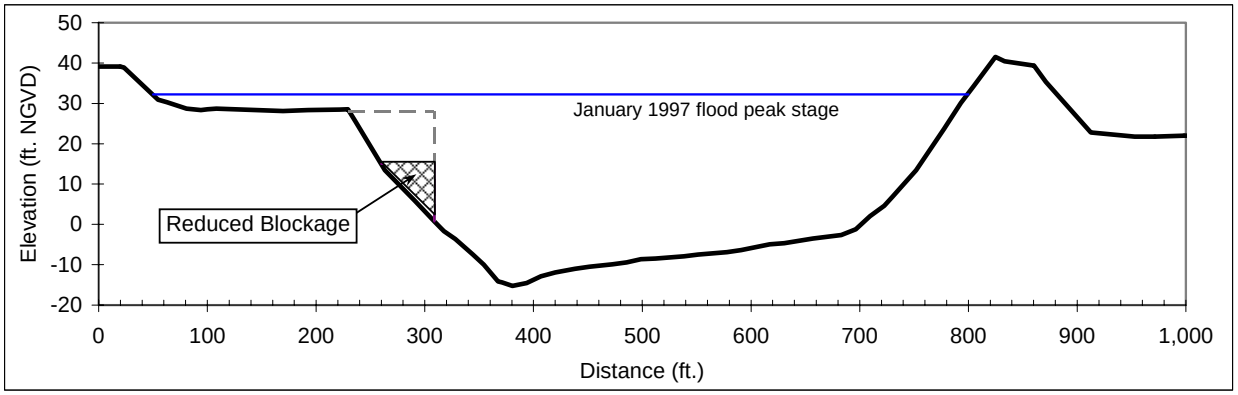

Figure 25. Cross-section Showing Reduced Blockage

Tables 7 and 8 summarize the peak stage impact results from these studies for the January 1997 flood simulation and “maximum flow” flood simulation, respectively. The impacts on the flow splits at the Fremont Weir and Sacramento Weir are summarized in Tables 9 and 10. Removing the two new marinas upstream of the American River reduces the maximum impact by almost half, from +0.20 ft. to +0.11 ft. in the 1997 flood simulation and from +0.15 ft. to +0.08 ft. in the “maximum flow” simulation. By reducing the size of the encroachment used to model the Natomas Area dense docks, the impacts upstream of I-5 are essentially eliminated.

Table 7. January 1997 Flood Simulation Peak Stage Impacts With Reduced Development Upstream of the Sacramento Weir

Location	Peak Stage Impact (ft.)		
	All Cumulative Development Components	Reduced Components Alt.1	Reduced Components Alt. 2
Sacramento River			
at Fremont Weir	+0.03	+0.02	0.00
at Verona gage	+0.06	+0.04	+0.01
u/s I-5 Marina	+0.20	+0.11	+0.02
u/s San Juan Rd. new Marina	+0.11	+0.03	+0.04
at Sacramento Weir	0.00	+0.02	+0.04
at American River	+0.05	+0.07	+0.08
at I Street	+0.06	+0.08	+0.09
u/s RM55.75 new Marina	+0.07	+0.09	+0.10
u/s 43rd Ave Bridge	0.00	0.00	0.00
u/s Freeport new Marina	-0.11	-0.09	-0.08
d/s Freeport Bridge	-0.16	-0.14	-0.13
d/s Clarksburg new Marina	-0.17	-0.15	-0.15

Table 8. "Maximum Flow" Flood Simulation Peak Stage Impacts With Reduced Development Upstream of the Sacramento Weir

Location	Peak Stage Impact (ft.)		
	All Cumulative Development Components	Reduced Components Alt. 1	Reduced Components Alt. 2
Sacramento River			
at Fremont Weir	+0.03	+0.02	+0.01
at Verona gage	+0.05	+0.03	+0.01
u/s I-5 Marina	+0.15	+0.08	+0.02
u/s San Juan Rd. new Marina	+0.09	+0.04	+0.05
at Sacramento Weir	+0.02	+0.04	+0.06
at American River	+0.04	+0.06	+0.08
at I Street	+0.05	+0.07	+0.08
u/s RM55.75 new Marina	+0.03	+0.05	+0.06
u/s 43rd Ave Bridge	-0.04	-0.02	-0.04
u/s Freeport new Marina	-0.13	-0.12	-0.11
d/s Freeport Bridge	-0.19	-0.18	-0.16
d/s Clarksburg new Marina	-0.21	-0.19	-0.18

Table 9. January 1997 Flood Simulation Peak Flow Impacts With Reduced Development Upstream of the Sacramento Weir

Location	Peak Flow Impact		
	All Cumulative Development Components	Reduced Components Alt. 1	Reduced Components Alt. 2
Sacramento River at Verona	-1,220 cfs (-1.15%)	-650 cfs (-0.61%)	-80 cfs (-0.08%)
Fremont Weir Spill	+1,140 cfs (+0.33%)	+650 cfs (+0.19%)	+100 cfs (+0.03%)
Sacramento Weir Spill	+270 cfs (+0.28%)	+660 cfs (+0.68%)	+1,150 cfs (+1.19%)
Sacramento River at I Street	-1,440 cfs (-1.18%)	-1,320 cfs (-1.08%)	-1,260 cfs (-1.03%)
Yolo Bypass below Sac Bypass	+1,360 cfs (+0.30%)	+1,290 cfs (+0.29%)	+1,260 cfs (+0.28%)

Table 10. "Maximum Flow" Flood Simulation Peak Flow Impacts With Reduced Development Upstream of the Sacramento Weir

Location	Peak Flow Impact (cfs)		
	All Cumulative Development Components	Reduced Components Alt. 1	Reduced Components Alt. 2
Sacramento River at Verona	-1,090 cfs (-1.00%)	-600 cfs (-0.55%)	-100 cfs (-0.09%)
Fremont Weir Spill	+920 cfs (+0.24%)	+500 cfs (+0.13%)	+90 cfs (+0.02%)
Sacramento Weir Spill	+590 cfs (+0.39%)	+1,040 cfs (+0.69%)	+1,470 cfs (+0.98%)
Sacramento River at I Street	-1,900 cfs (-1.34%)	-1,780 cfs (-1.25%)	-1,710 cfs (-1.20%)
Yolo Bypass below Sac Bypass	+1,510 cfs (+0.27%)	+1,530 cfs (+0.28%)	+1,540 cfs (+0.28%)

6.2 Sensitivity of Riparian Vegetation Enhancement Roughness Coefficient

Riparian vegetation enhancement was modeled between the American River and Miller Park (model river miles 60.40 to 57.70) by increasing the bank roughness coefficient in various areas as shown in Figure 18. This representation was based on the best information available in regards to likely vegetation enhancement in the Sacramento Riverfront Master Plan (SRMP). Due to the conceptual nature of the SRMP and the uncertainty of what level of vegetation enhancement will occur and what it will actually mean in the way of roughness increase, an analysis was made to determine the sensitivity of the computed water surface to the bank roughness. This analysis assumed a bank roughness factor of 0.10 for both banks for the entire reach between model river miles 60.40 and 57.70. The existing conditions bank roughness coefficient in this reaches ranges from 0.05 to 0.08, so the value of 0.10 represents a 25% to 100% increase. As shown in Table 11, the increased bank roughness had no impact on the computed water surface, therefore it can be concluded that increased bank roughness is not a significant factor in regards to impacts on the water surface elevation.

Table 11. Peak Stages and Impacts from Bank Roughness Sensitivity Analysis

Location	January 1997 Flood Simulation			"Maximum Flow" Flood Simulation		
	Peak Stage (ft. NGVD)		Impact (ft.)	Peak Stage (ft. NGVD)		Impact (ft.)
	Cumulative Dev.	Bank Roughness Increae		Cumulati ve Dev.	Bank Roughness Increae	
Sacramento River						
u/s end Fremont Weir	39.19	39.19	0.0	40.41	40.41	0.0
d/s end Fremont Weir	39.11	39.11	0.0	40.31	40.31	0.0
at Verona gage	39.37	39.37	0.0	40.72	40.72	0.0
u/s I-5 Marina	35.57	35.56	-0.01	37.47	37.46	-0.01
u/s San Juan Rd. Marina	31.49	31.49	0.0	34.27	34.27	0.0
u/s end Sac Weir	30.01	30.01	0.0	33.19	33.19	0.0
d/s end Sac Weir	30.58	30.58	0.0	33.54	33.54	0.0
at I Street	30.31	30.31	0.0	33.53	33.54	+0.01
at Freeport gage	23.82	23.81	-0.01	26.72	26.71	-0.01
at Snodgrass Slough	19.08	19.08	0.0	21.66	21.65	-0.01
Yolo Bypass						
at Woodland gage	31.42	31.42	0.0	33.07	33.07	0.0
at Lisbon gage	24.14	24.14	0.0	26.04	26.04	0.0

7 Conclusions

As noted in the report, the impacts reported herein represent a cumulative "worst case" analysis. The computed impacts are small downstream from the Sacramento Weir, with water level changes less than 0.1 ft. for all conditions. In addition, the flow split between the Yolo Bypass and Sacramento River remains essentially unchanged. The computed impacts upstream of the Sacramento Weir were slightly larger, with maximum impacts of about 0.2 feet. Though these impacts are still small, they occur in an area where levee freeboard appears to be insufficient. It was found that by reducing the new docks and removing the new marinas upstream of the Sacramento Weir these impacts could be eliminated. It was also found that the enhancement of riparian vegetation does not impact the system flood capacity.

APPENDIX D
March 2, 2006 National Marine Fisheries Service (NMFS) ESA Section 7 Consultation

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802- 4213

In response refer to:
151422SWR2005SA00273:HLB

MAR 0 2 2006

Michael Finan
Chief, Delta Office
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Dear Mr. Finan:

This letter responds to your March 18, 2005, request for formal consultation with NOAA's National Marine Fisheries Service (NMFS), pursuant to the Endangered Species Act (ESA) and the Magnuson-Stevens Fishery Conservation and Management Act, for a U.S. Army Corps of Engineers (Corps) permit (No. 200400970) for bank stabilization work at Grupe's The Rivers project (Grupe's Bank Stabilization project), along the Sacramento River, in Yolo County, California. You have determined that Grupe's Bank Stabilization Project is likely to adversely affect Federally listed endangered Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*), threatened Central Valley spring-run Chinook salmon (*O. tshawytscha*), threatened Central Valley steelhead (*O. mykiss*), their designated critical habitat, and the Essential Fish Habitat (EFH) of Pacific salmon.

NMFS previously responded to your letter on April 28, 2005, and found that all of the information necessary to initiate formal consultation was not provided. The response provided a list of information needs, and advised the Corps that NMFS has proposed to list the southern distinct population segment (DPS) of the North American green sturgeon (*Acipenser medirostris*) as a threatened species (70 FR 17386). On January 16, 2006, Karen Shafer of Gibson and Skordal, LLC, the Corp's designated representative for the ESA consultation, provided NMFS with much of the requested information. On February 16, 2006, NMFS held a conference call with Gibson and Skordal, LLC, to finalize details of how certain conservation measures will be incorporated into the project design to avoid and minimize adverse effects to anadromous fish and their habitat. On February 16, 2006, following the conference call, NMFS received an email from Karen Shafer updating the project description to include details for the installation of large woody debris (LWD).

The Corps proposes to permit the Grupe's Bank Stabilization project on the Sacramento River between river mile (RM) 60.5 and 61.3 on the West Bank of the Sacramento River, just upstream from the confluence with the American River. The proposed action will permit the stabilization of approximately 3,600 linear feet of the west bank of the Sacramento River. The bank

stabilization will consist of a longitudinal peak stone dike with a vegetated berm, and an armored bank slope. First, soil fill will be placed along the riverbank to create a 2:1 slope. The surface of the slope will then be armored with rock riprap. A longitudinal peaked stone dike will be constructed in front of the armored slope, and a berm will be created by backfilling the area between the dike and the armored slope with soil. The protection will follow the natural contour of the river bank.

The dike and the berm will anchor existing and supplemental LWD below the average summer water surface elevation and on the berm surface. Existing LWD will be anchored into place. Supplemental LWD will be provided by adding approximately 32 live trees that may have to be removed from the armored slope during construction, and trees that are slated to be removed from a nearby golf course. The post-project total of LWD will be increased by a factor of five (*i.e.*, from 22 units of existing LWD to 110 units post project). LWD will be evenly distributed across the length of the project. Large trees will be placed individually and smaller trees will be clustered together. The minimum diameter at breast height will be between 6 and 10 inches. Once the stabilization is and placement of LWD is complete, native vegetation will be planted on the berm and the armored slope. 6,000 herbaceous sedges and rushes will be planted on the berm in four rows, spaced at 6-foot centers. On the armored slope, three evenly spaced rows of trees, comprised of a mix of willow, alder, and cottonwood, will planted every 12 feet. Monitoring and maintenance of all project features will occur for four years following project completion. Instream construction is scheduled for August 1 through October 31.

The project has been planned and designed with priorities of avoiding and minimizing short-term construction impacts, and enhancing long-term instream and nearshore habitat conditions for anadromous salmonids. Instream project activities will occur during summer and early fall months when Federally listed anadromous salmonids and the juvenile North American green sturgeon are not likely to be present within the action area. The construction of a berm will create seasonally inundated shallow water habitat that is beneficial to juvenile salmonids for rearing and refugia from predators. The preservation and supplementation of LWD at the project site will maintain and enhance juvenile rearing conditions by creating habitat complexity, food production, and refugia from predators. The planting of native riparian vegetation will create additional nearshore habitat complexity and food production that will increase in complexity and quality over time. These measures will provide similar benefits to juvenile North American green sturgeon. Adult salmonids and sturgeon are not expected to be affected by the project because they use this reach of the river as a migration corridor, and are not typically found in nearshore shallow water habitats.

ESA Section 7 Consultation

NMFS has received the information necessary to initiate section 7 consultation. Based on our review of the material provided with your request, the subsequent information that was provided by Gibson and Skordal, LLC, and the best scientific and commercial information currently available, NMFS has determined that the proposed Grupe's Bank Stabilization project is not likely to adversely affect Sacramento River winter-run Chinook salmon, Central Valley spring-

run Chinook salmon, Central Valley steelhead, or their designated critical habitat. We have also determined that the project is not likely to adversely affect the southern DPS of the North American green sturgeon. NMFS has reached this determination for the following reasons: (1) the project will be constructed in the summer and early fall months when anadromous salmonids and North American green sturgeon are not expected to be within the project area; and (2) the project design integrates substantial conservation measures that will prevent short-term habitat impacts and provide long-term habitat enhancements.

This concludes consultation for the proposed action. This concurrence does not provide incidental take authorization pursuant to section 7(b)(4) and section 7(o)(2) of the Endangered Species Act. Reinitiation of consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law), and if: (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered; (2) the action is subsequently modified in a manner that causes adverse effects to listed species or critical habitat; or (3) a new species is listed or critical habitat designated that may be affected by this action.

Essential Fish Habitat Consultation

We have also reviewed this project for impacts to EFH for Pacific salmon under section 305(b)(2) of the Magnuson-Stephens Fishery Conservation and Management Act and find the implementation of the project will not adversely affect EFH for Pacific salmon, therefore, we do not have any additional conservation recommendations for the proposed action.

Please contact Howard Brown at (916) 930-3608, or via e-mail at howard.brown@noaa.gov if you have any questions concerning this project, or require additional information.

Sincerely,

for Rodney R. McInnis
Regional Administrator

cc: Karen Shaffer, Gibson and Skorkal, 2277 Fair Oaks Blvd., Suite 105, Sacramento, CA 95825

References:

U.S. Army Corps of Engineers, Sacramento District. 2004. Standard Assessment Methodology for the Sacramento River Bank Protection Project, Final. Prepared by Stillwater Sciences and Dean Ryan Consultants, Sacramento California.