Meeting Agenda

PLACE: Civic Center City Council Chambers
1110 West Capitol Avenue
West Sacramento, CA 95691
DATE: Thursday, August 14, 2014
TIME: 10:30 a.m.

1. Agenda Approval

2. Public Comment on Matters Not on the Agenda

3. Approval of July 10, 2014 Minutes

4. Review Monthly/YTD Revenue & Expenses

CONSENT AGENDA

5. Consideration of Notification to Property Owners of Flood Assessment Corrections, Waival of Prior Year Corrected Amounts, Administrative Corrections to Land Use for Compliance with the 2007 Engineer’s Report.

Comments: A recent review of the flood assessment database identified, corrected and updated data. This item seeks Board approval to send out notifications to affected property owners.

6. Consideration of Approval of a Contract with MBK Engineers for Program Management Support for the West Sacramento Levee Improvement Program.

Comments: The West Sacramento Area Flood Control Agency is aggressively engaged in an overall flood risk reduction program – the magnitude and complexity of which requires significant and specialized resources. This item seeks Board approval to augment staff resources with consultant services that bring a unique set of relationships and deep knowledge of the institutional framework of state and federal requirements.

Comment: The Department of Water Resources has approved contingency funding for $163,775 to fund the final Flood Protect Regional Flood Management Plan, outreach to stakeholders in the region and to initiate the development of the Yolo Bypass/Cache Slough Integrated Water Management Plan as well as additional grant management funds for WSAFCA.

8. Consideration of Contract Amendment #3 for SCS Engineers for Additional Phase II Assessment Services in Support of the Sacramento River Southport Early Implementation Project.

Comments: SCS Engineers has presented a stage 3 Phase II workplan to complete the characterization and extent of impacted soils at a former Above-ground Storage Tank site. This contract amendment will fund the investigation and development of an implementable corrective action plan.

9. Consideration of approval of Amendment 4 to Task Order No. 4 in support of the Design Services Contract with HDR Inc. for the Sacramento River Southport EIP

Comments: WSAFCA executed a contract with HDR Engineering, Inc. (HDR) for the provision of design services for the Southport Sacramento River Early Implementation Project (Project) on August 12, 2010. Project Task Order No. 4 (TO4) was issued on February 9, 2012, to provide final design services for the project. During the course of final design efforts, HDR was directed to complete additional tasks not originally identified in the scope of work for TO4 or Amendments to TO4. Approval of Amendment No. 4 to TO4 will incorporate into the contract the additional out of scope tasks necessary for completion of final project design and environmental clearance and move the project the construction phase.

10. Consideration and Adoption of Resolution #14-08-01 Certifying the Environmental Impact Report, Adopting Findings of Fact and Statement of Overriding Considerations, and Adopting Mitigation Monitoring & Reporting Plan for the Southport Sacramento River Early Implementation Project; and Approval of the Southport Sacramento River Early Implementation Project Refined Applicant Preferred Alternative.

Comments: This item seeks Board certification via resolution of the Final Environmental Impact Report and other CEQA documents for the Sacramento River Southport Early Implementation Project. It also requests approval of the Refined Applicant Preferred Alternative, as described in the Final Environmental Impact Report.
Impact Report, as the project to be constructed.

11. WSAFCA Project Updates

12. Informational Items

13. Adjourn

I, Kenneth A. Ruzich, Secretary, declare under penalty of perjury that the foregoing agenda for the August 14, 2014 regular meeting of the West Sacramento Area Flood Control Agency was posted August 8, 2014 in the office of the City Clerk, 1110 West Capitol Avenue, West Sacramento, CA and in the WSAFCA office, 1420 Merkley Avenue, Suite 4, West Sacramento, CA, and was available for public review.

Kenneth A. Ruzich, Secretary
# WSAFCA Cash Position Estimate

<table>
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<tr>
<th>Fund 870 Cash Position</th>
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<th>6/30/2014</th>
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<td><strong>Combined Cash Position (870 &amp; 257)</strong></td>
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### 1. FUND BALANCE

**(Beginning of Period)**

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### 2. CASH RECEIPTS

- **(a) State Revenue (grants)**
  - 940,448

- **(b) Flood Assessment**
  - 4,129,777

- **(c) Reimbursements (DIA, CFA)**
  - 61,805

- **(d) Admin Support (JPA)**
  - 755

- **(e) Misc Rev.**
  - 68,713

**TOTAL CASH RECEIPTS**

5,329,703

### 3. TOTAL CASH AVAILABLE

**(Before cash out)**

10,786,614

### 4. CASH PAID OUT

- **(a) Admin Support JPA**
  - Program 10
    - 95,155
  - 415-0040
    - 64,911
  - WO 0000 (Ask)
    - 30,297
  - Admin DBM
    - 438,881

Subtotal (a)

629,384

- **(b) Debt Service**
  - 2008 Bond
    - 672,000
  - 2011 Bond
    - 892,000

Subtotal (b)

1,564,000

- **(c) Transfers**
  - Cash5
    - 58,598
  - RD 537
    - 49,319
  - RD 900
    - 598,578

Subtotal (c)

706,450

- **(d) CPF**
  - GRR, WO 40002
    - 571,512
  - Deficiency Repairs, WO 40005
    - 450
  - Rivers EIP const., WO 40009
    - 294,789
  - FEMA Remapping Support, WO 40010
    - 14,823
  - CPF EIP const., WO 40011
    - 5,529
  - Regional FNMP, WO 40012
    - 1,039,950
  - Jaxs Analysis, WO 41150
    - -
  - ISt. EIP Design, WO 41160
    - 630
  - ISIE Const. WO 41181
    - 34,302
  - Southport EIP, WO 41164
    - 4,075,170
  - Bridge District, WO 41165
    - 619
  - RIVER EIP Design, WO 41166
    - 19,687
  - Other Proj Related Expenses
    - -

Subtotal (d)

6,066,043

### 5. TOTAL CASH AVAILABLE

**(After cash out)**

8,910,757

### 6. TOTAL CASH PAID OUT

**(Sum 5a thru 5c)**

8,910,757

### 7. CASH POSITION

**(Start of Period)**

1,820,833

**(End of Period)**

3,931,080
## Project Expenditures June 1 thru June 30, 2014

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<thead>
<tr>
<th>Project</th>
<th>Total by Vendor</th>
<th>Total by Project</th>
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<tr>
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## Project Expenditures YTD

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<tr>
<th>Project</th>
<th>Total by Vendor</th>
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<td>Yolo County</td>
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Total by Project: 5,066,043
OBJECTIVE
The object of this report is to receive Board direction to send out notices of corrected flood assessment calculations to affected property owners, and to waive outstanding corrected flood assessment amounts for prior years.

RECOMMENDED ACTION
It is respectfully recommended that the JPA Board:
1. Send out notifications of corrected flood assessment rates to affected property owners; and
2. Waive collection of outstanding corrected amounts for prior fiscal years.

BACKGROUND
On May 8, 2007, the Board adopted Resolution 07-05-01 declaring the Agency’s intent to levy flood control assessments pursuant to the Benefit Assessment Act of 1982 (Proposition 218). Balloting for the proposed assessment district was conducted between May 22, 2007 and July 10, 2007. On July 10, 2007, the Board conducted a public hearing on the Engineer’s Report and the question of levying assessments for flood risk reduction. On July 16, 2007, with 70.5% of returned ballots in favor of assessment district formation, the Board approved Resolution 07-05-02, which approved the Final Engineer’s Report, the ballot results, the determination of assessments, entry onto the Yolo County Assessment Roll, and subsequent actions.

As described in the Engineer’s Report, flood assessments for each property are proportional to the relative flood risk reduction benefit received by each property and are based on potential flood depth, acreage, land use, and amount of first floor square footage. Individual property assessments are adjusted periodically as improvements are made to the property or, occasionally, when property is made vacant.

Recent review of the database identified errors in data collection which have been corrected. The new rates for the affected properties have been added to the property tax roll. At the June 12, 2014 meeting staff requested direction to collect corrected flood assessment amounts as allowed by statute.

ANALYSIS
This analysis provides additional information to the June 12, 2014 staff report and subsequent Board direction to staff. The June staff report outlined a recent review of the flood assessment data base that exposed errors in the data collection process. The errors resulted in the incorrect assessment of approximately 350 parcels for an amount of up to $89,499 per year. Staff reviewed and corrected the data set and implemented changes to data administration to prevent future errors. At staff’s recommendation, the Board provided direction to collect corrected assessments in the amount of $245,000 for the prior four years and to issue refunds to property owners that were overly assessed. Four years is the maximum time allowed for past collections.
Consideration of Forgiveness of Flood Assessments for Prior Fiscal Years
August 14, 2014
Page 2

Upon further evaluation, staff is now recommending that the Board waive collection of the prior year corrected amounts for the following reasons.

- This error was in no part the fault of the property owner. Collecting back assessments will pose a financial hardship on some and an additional unanticipated expense on others. This assessment was imposed based on an overwhelming vote of the citizenry who put their faith and trust in WSAFCA.

- Changes in property ownership over the last four years will likely reduce the amount collected by the Agency. The ability to locate and collect from previous owners is problematic and could take extensive research and time.

- There is considerable cost in staff time in administering the collection process which will decrease the net collected amount.

For these reasons staff now recommends sending out notifications of the corrected flood assessment and program information to the affected property owners and waiving collection of the corrected amounts for prior fiscal years. Refunds will be given to those that were overly assessed.

Staff will continue to administratively review properties for the correct flood assessment factors and, if incorrect data is identified, or changes to the property occur, will assign the appropriate factors to these properties in conformance with the 2007 Engineer’s Report for addition to the subsequent tax roll.

Coordination and Review
This report was coordinated with WSAFCA Counsel, the City Manager’s Office and Public Works Department.

Budget/Cost Impact
The corrected rates have been added to the property tax roll. The corrected rates will result in approximately $89,500 additional revenue annually.

ATTACHMENT

Attachment A: Draft Notification Letter and Program Information Flyer.
June 17, 2014

Address

Subject: Notice of Adjustment to the Flood Assessment on Your Property

Dear Sir/Madam,

West Sacramento property owners passed a Proposition 218 ballot measure in 2007 that created a property assessment district for the purpose of flood risk reduction. The 2007 Flood Assessment provides local funding for the design and construction of levee improvements identified in the West Sacramento Levee Improvement Program. The West Sacramento Area Flood Control Agency (WSAFCA) is the governing body for the West Sacramento Levee Improvement Program and administers the flood assessment.

The levee improvements funded by the assessment directly benefit all assessed property, including your property. Revenue from the flood assessment has allowed WSAFCA to expeditiously design and construct levee improvements that reduce the risk of flooding and comply with federal and state requirements. To learn more about West Sacramento’s levee improvement program and how local flood assessment money is used, please refer to the flyer that accompanies this notice.

WSAFCA recently conducted an audit of its Flood Assessment database to ensure that properties are correctly assessed relative to the property’s current use and other factors. The Flood Assessment is based on a calculation that takes into consideration potential flood depth, amount of land, land use, and first floor area in square feet. For example, the current land use may differ from the database when a vacant property has been developed, or improvements have been made that change the first floor area of an existing improved property.

The audit found that the assessment on your property is incorrect. The corrected assessment will appear on your 2014 property tax bill as the line item "W SAC FLOOD CONT (JPA)"

The previous assessment, new assessment, and basis for the corrected assessment are indicated in the table below:
Notice of Adjustment to the Flood Assessment to Your Property

<table>
<thead>
<tr>
<th>APN:</th>
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<tbody>
<tr>
<td>Correction Basis:</td>
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<tr>
<td>Previous Assessment</td>
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<td>$</td>
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</table>

If you believe there is an error in the corrected assessment, have any questions about the corrected assessment or need additional information about the assessment calculation, please contact Mark Zollo, Senior Administrative Analyst, Public Works at (916) 617-4541 or markz@cityofwestsacramento.org.

Sincerely,

Kenneth A. Ruzich
General Manager
West Sacramento Area Flood Control Agency
The City of West Sacramento and West Sac Flood Protect are committed to improving levees to increase public safety and reduce the risk of flooding in the community.

What is West Sac Flood Protect?
Created in 1994, West Sac Flood Protect coordinates, funds and constructs major flood risk reduction projects and spearheads West Sacramento-area flood risk reduction efforts. The three-member board represents a joint powers authority by the City of West Sacramento, Reclamation District 900 and Reclamation District 537.

What do we do?
We design and construct levee improvement projects to increase public safety, protect properties and meet federal and state mandates. We work to achieve a minimum 200-year level of flood protection as mandated by the 2008 Central Valley Flood Protection Act and ensure continuing federal and state funding assistance for levee repairs and maintenance.

Program goals:
• Promptly construct levee improvements to reduce flood risk as quickly and efficiently as possible.
• Construct improvements that are socially, economically and environmentally acceptable.
• Ensure continuing federal and state assistance for levee repairs and maintenance.
• Preserve and enhance riparian and other native habitats.
• When possible, provide recreation and open space areas for the city that are compatible with flood improvement projects.

Who owns and maintains the levees in West Sacramento?
• Reclamation District 900
• Reclamation District 537
• California Department of Water Resources
• U.S. Army Corps of Engineers
What is the status of levee improvement projects in West Sacramento?
Approximately 10 miles of levee improvements are already complete. A feasibility study report, called the General Reevaluation Report, is being completed by the U.S. Army Corps of Engineers in partnership with the state and West Sac Flood Protect. The report will determine how many of the 52 miles of levees will still need improvement.

- **Completed projects:** I Street Bridge EIP, CHP Academy EIP, Rivers EIP, Yolo Bypass South Project-Slip Repair #1, Yolo Bypass Slip Repair #2, Bridge District Levee Maintenance Road.
- **Projects underway:** Army Corps Sac Bank Project, Sacramento River Southport EIP.

How much will levee improvements cost? And who is paying for them?
The cost to improve the 52 miles of levees that surround and protect the city is approximately $460 million. State and federal partnerships pay up to 90 percent of the city’s total levee improvement projects. Our community is instrumental in advancing levee improvements by paying for a small, but essential, portion of the flood risk reduction program.

The local funding mechanisms are:

1. **Property tax assessment.** In 2007, West Sacramento property owners approved an annual parcel-based assessment dedicated toward levee improvement projects. The annual assessment allows for up to $40 million in bonding capacity.

2. **Measures U & V.** Two voter-approved measures passed in 2008. Measure U continued a one-fourth cent portion (capital allocation) of an existing one-half cent sales tax for an additional 20 years. Measure V provided guidelines for the use of one-fourth cent of sales tax proceeds. A portion of the proceeds fund flood protection improvements.

3. **In-lieu fee on new development.** This fee is applied to new development to help fund levee improvements, in lieu of each development designing and constructing their own flood risk reduction measures. By the time the city is fully built out, we expect this fee to accumulate about $40 million for flood protection.

Early Risk Reduction
To accelerate improvements to some of the most significant levee deficiencies, we are moving forward with Early Implementation Projects (EIP). The state’s EIP program is the result of Proposition 1E and Proposition 84, authorizing the Department of Water Resources to make funds available to local agencies for flood risk reduction work. We have completed work on three vulnerable stretches of levees through the EIP program—Rivers, I Street Bridge and CHP Academy. Currently, work is underway on a fourth EIP, the Sacramento River Southport project.

How will levee improvement projects affect businesses and development?
West Sacramento is home to over $5.3 billion in commercial, residential and industrial property and 50,000 residents. Strengthening our levees enhances our community and drives economic development by providing more stability for businesses now and in the future. By taking proper precautions to safeguard levees, key infrastructure and transportation corridors can remain open and operational during severe storms. West Sacramento is home to the U.S. Postal Processing and Distribution Center, Union Pacific’s main rail line, U.S. Highway 50, Interstate 80 and the Port of West Sacramento.

Corporate headquarters such as Raley’s, CalSTRS and KOVR TV have set roots in the community. Other major companies with a strong presence in West Sacramento including IKEA, Wal-Mart, Home Depot, Nugget Market, Target and more will also see the value of continuing to invest in our region if we invest in their safety. A concerted effort to maintain levee security can only boost West Sacramento’s economy.

For more information,
email Greg Fabun, Flood Protection Manager at gregf@cityofwestsacramento.org.
call 916-617-4855 or
visit www.cityofwestsacramento.org/city/flood

Project Partners
MEETING DATE: August 14, 2014

ITEM # 6

SUBJECT:

CONSIDERATION OF APPROVAL OF A CONTRACT WITH MBK ENGINEERS FOR PROGRAM MANAGEMENT SUPPORT FOR THE WEST SACRAMENTO LEVEE IMPROVEMENT PROGRAM

INITIATED OR REQUESTED BY:

[ ] JPA Board  [X] Staff

[ ] Other

REPORT COORDINATED OR PREPARED BY:

Greg Fabun, Flood Protection Manager

Denix Anbiah, Public Works Director

ATTACHMENT [ X ] Yes  [ ] No  [ ] INFORMATION  [X] DIRECTION  [ X ] ACTION

OBJECTIVE

The objective of this report is to approve the contract with MBK Engineers for services to support the West Sacramento Levee Improvement Program.

RECOMMENDED ACTION

It is respectfully recommended that the JPA Board:

1. Approve a two-year Contract with MBK Engineers in the amount of $1,248,000, $744,000 in year 1 and $504,000 in year 2, for services to support the West Sacramento Levee Improvement Program.
2. Authorize the General Manager or his designee to take any and all actions reasonably necessary to complete the work described in the Contract, including the approval of minor Contract amendments that, in the opinion of the General Manager, will not materially alter the purpose of the Contract nor increase the total compensation due under the Contract by more than 10% ($124,800).

BACKGROUND

The West Sacramento Area Flood Control Agency (WSAFCA) is aggressively engaged in an overall flood risk reduction program titled the West Sacramento Levee Improvement Program (WSLIP). The purpose of the program is to achieve a minimum level of 200 year protection for the City of West Sacramento by improving up to 50 miles of levees that currently provide protection to the City. The magnitude and complexity of the program requires significant and specialized resources. In addition to engineering, the program elements include: environmental review and permitting; real estate; public relations; legislative advocacy; coordinated planning and technical evaluation; agency approvals through the State Department of Water Resources (DWR), the U.S. Army Corps of Engineers (Corps) and the Central Valley Flood Protection Board.

Significant progress has been made over the past several years by the City of West Sacramento (City), WSAFCA, and its consultants in obtaining state and federal funding to advance the WSLIP. In order to provide the most effective and strategic management of the program, staff recommends continued augmentation of staff resources with consultant services that bring a unique set of relationships and deep knowledge of the institutional framework. MBK Engineers has been assisting the City and WSAFCA over the last eight years in these activities. The amount of work authorized under the existing MBK contract has not been expended, however, the contract duration expires August 31, 2014.

ANALYSIS

To ensure continuity of progress on the flood protection program, staff solicited proposals from qualified firms for flood program management support. Only one proposal was received (from MBK Engineers) on the due date of August 1, 2014. Staff has reviewed the firm’s proposal and qualifications and determined that they meet the requirements as stated in the RFP.

The proposed contract is intended to cover the period beginning Sept 1, 2014 through June 30, 2016. MBK services will be required throughout the duration of this period and will be invoiced on a time and expense
Consideration of Contract with MBK Engineers  
August 14, 2014  
Page 2

basis. Examples of some of the major activities that are anticipated to occur within this contract period are as follows:

- Facilitate an update to the WSLIP strategic plan.
- Support WSAFCA on federal and state legislative issues, policies and opportunities, including WRDA and FEMA.
- Coordinate with the US Army Corps, the Central Valley Flood Protection Board, and the Department of Water Resources on decision documents and permit approvals.
- Support advancement of the Southport EIP design, environmental, permitting and construction activities.
- Prepare a Section 408 package to the USACE for the Southport EIP construction project.
- Work with WSAFCA to maximize the amount of federal credit from the USACE for past and present levee projects.
- Support WSAFCA in pursuing WSLIP interests in the regional planning effort.
- Support City efforts on FEMA remapping.
- Review the Central Valley Hydrology Study (CVHS) and support WSLIP interests in same.
- Provide general flood risk management support as directed by WSAFCA staff.
- Provide a variety of technical services in support of the WSLIP as directed by WSAFCA staff.

**Alternatives**

1. Staff recommends the JPA approve the contract with MBK Engineers in the amount of $1,372,800 (base plus contingency) for services to support the West Sacramento Levee Improvement Program.

2. The JPA may choose to make adjustments or modifications to the contract.

3. The JPA may choose not to award the contract at this time. This is not a recommended action because the services MBK provides are instrumental to the success of the program.

**Coordination and Review**

This report was coordinated with the WSAFCA, staff from Reclamation District 900, the WSAFCA Treasurer, and WSAFCA Counsel.

**Budget/Cost Impact**

The contract for service with MBK Engineers in the amount of $1,372,800 will be funded by a combination of property flood assessment revenue, bond proceeds, State of California Proposition 1E, and the City of West Sacramento Flood In-lieu fees.

**ATTACHMENT**

MBK's Contract for Services and Proposal for Services
CONTRACT FOR SERVICES

THIS CONTRACT is made on ________________, 2014, by and between the West Sacramento Area Flood Control Agency (WSAFCA), and MBK Engineers ("Consultant").

WITNESSETH:

WHEREAS, WSAFCA desires professional flood program management support services;

WHEREAS, the Consultant has presented a proposal for such services to WSAFCA, dated August 1, 2014, (attached hereto and incorporated herein as Exhibit “A”) and is duly licensed, qualified and experienced to perform those services;

NOW, THEREFORE, the parties hereto mutually agree as follows:

1. SCOPE OF SERVICES:

Consultant shall do all work, attend all meetings, produce all reports and carry out all activities necessary to completion of the services described in Exhibit “A”. This Contract and its exhibits shall be known as the “Contract Documents.” Terms set forth in any Contract Document shall be deemed to be incorporated in all Contract Documents as if set forth in full therein. In the event of conflict between terms contained in these Contract Documents, the more specific term shall control. If any portion of the Contract Documents shall be in conflict with any other portion, provisions contained in the Contract shall govern over conflicting provisions contained in the exhibits to the Contract.

Consultant enters into this Contract as an independent contractor and not as an employee of WSAFCA. This Consultant shall have no power or authority by this Contract to bind WSAFCA in any respect. Nothing in this Contract shall be construed to be inconsistent with this relationship or status. All employees, agents, contractors or subcontractors hired or retained by the Consultant are employees, agents, contractors or subcontractors of the Consultant and not of WSAFCA. WSAFCA shall not be obligated in any way to pay any wage claims or other claims made against Consultant by any such employees, agents, contractors or subcontractors, or any other person resulting from performance of this Contract.

The Consultant agrees it has satisfied itself by its own investigation and research regarding the conditions affecting the work to be done and labor and materials needed, and that its decision to execute this Contract is based on such independent investigation and research.

2. TERM OF CONTRACT

A. The services of Consultant are to commence upon receipt of written notice to proceed from WSAFCA, and shall be undertaken and completed, unless extended, within a term of approximately two (2) years from the commencement date and terminating on June 30, 2016, in accordance with the Services Proposal described in Exhibit “A.”

B. Consultant’s failure to complete work in accordance with the Schedule of Performance as described in Exhibit “B” may result in delayed compensation as described in Section 3.

C. WSAFCA General Manager or his or her designee may, by written instrument signed by the Parties, extend the duration of this Contract for a period equal to the original term of this Contract in the manner provided in Section 5, provided that the extension does not require the payment of compensation in excess of the maximum compensation set forth in Section 3, Compensation.
3. **COMPENSATION:**

A. The Consultant shall be paid monthly for the actual fees, costs and expenses for all time and materials required and expended, but in no event shall total compensation exceed $1,372,800, without WSAFCA’s prior written approval.

B. Said amount shall be paid upon submittal of a monthly billing showing completion of the tasks that month. Consultant shall furnish WSAFCA with invoices for all expenses as well as for all materials authorized by this Contract. The invoices shall be submitted with the monthly billings. If Consultant’s performance is not in conformity with the Schedule of Performance, payments may be delayed or denied, unless the Consultant’s failure to perform in conformity with the Schedule of Performance is a documented result of WSAFCA’s failure to conform with the Schedule of Performance, or if the Schedule of Performance is extended pursuant to Section 5.

C. If the work is halted at the request of WSAFCA, compensation shall be based upon the proportion that the work performed bears to the total work required by this Contract, subject to Section 4.

4. **TERMINATION:**

A. This Contract may be terminated by either party, provided that the other party is given not less than 30 calendar days’ written notice (delivered by certified mail, return receipt requested) of intent to terminate.

B. WSAFCA may temporarily suspend this Contract, at no additional cost to WSAFCA, provided that the Consultant is given written notice (delivered by certified mail, return receipt requested) of temporary suspension. If WSAFCA gives such notice of temporary suspension, Consultant shall immediately suspend its activities under this Contract.

C. Notwithstanding any provisions of this Contract, Consultant shall not be relieved of liability to WSAFCA for damages sustained by WSAFCA by virtue of any breach of this Contract by Consultant, and WSAFCA may withhold any payments due to Consultant until such time as the exact amount of damages, if any, due WSAFCA from Consultant is determined.

D. In the event of termination, the Consultant shall be compensated as provided for in this Contract, except as provided in Section 4C. Upon termination, WSAFCA shall be entitled to all work, including but not limited to, appraisals, inventories, studies, analyses, drawings and data estimates performed to that date in accordance with Section 7 hereof.

5. **AMENDMENTS, CHANGES OR MODIFICATIONS:**

Amendments, changes or modifications in the terms of this Contract may be made at any time by mutual written agreement between the parties hereto and shall be signed by the persons authorized to bind the parties hereto.

6. **EXTENSIONS OF TIME:**

Consultant may, for good cause, request extensions of time to perform the services required hereunder. Such extensions shall be authorized in advance by WSAFCA in writing and shall be incorporated in written amendments to this Contract or the attached Work Program in the manner provided in Section 5.
7. PROPERTY OF WSAFCA:

A. It is mutually agreed that all materials prepared by the Consultant under this Contract shall become the property of WSAFCA, and the Consultant shall have no property right therein whatsoever. Immediately upon termination, WSAFCA shall be entitled to, and the Consultant shall deliver to WSAFCA, all data, drawings, specifications, reports, estimates, summaries and other such materials as may have been prepared or accumulated to date by the Consultant in performing this Contract which is not Consultant's privileged information, as defined by law, or Consultant's personnel information, along with all other property belonging exclusively to WSAFCA which is in the Consultant's possession.

B. Additionally, it is agreed that the parties intend this to be a contract for services and each considers the products and results of the services to be rendered by Consultant hereunder (the "Work") to be a work made for hire. Consultant acknowledges and agrees that the Work (and all rights therein, including, without limitation, copyright) belongs to and shall be the sole and exclusive property of WSAFCA.

8. COMPLIANCE WITH LOCAL LAW:

Consultant shall comply with all applicable laws, ordinances, and codes of federal, State and local governments, and shall commit no trespass on any public or private property in performing any of the work authorized by this Contract. It shall be WSAFCA's responsibility to obtain all rights of way and easements to enable Consultant to perform its services hereunder. Consultant shall assist WSAFCA in providing the same.

9. WARRANTIES AND RESPONSIBILITIES - CONSULTANT:

A. Consultant agrees and represents that it is qualified to properly provide the services set forth in Exhibit "A" in a manner which is consistent with the generally accepted standards of Consultant's profession.

B. Consultant agrees and represents that the work performed under this Contract shall be in accordance with applicable federal, State and local law in accordance with Section 17A hereof.

C. Consultant shall designate a project manager who at all times shall represent the Consultant before WSAFCA on all matters relating to this Contract. The project manager shall continue in such capacity unless and until he or she is removed at the request of WSAFCA, is no longer employed by Consultant, or is replaced with the written approval of WSAFCA, which approval shall not be unreasonably withheld.

D. Consultant shall provide corrective services without charge to WSAFCA for services which fail to meet the above professional and legal standards and which are reported to Consultant in writing within sixty (60) days of discovery. Should Consultant fail or refuse to perform promptly its obligations, WSAFCA may render or undertake performance thereof and the Consultant shall be liable for any expenses thereby incurred.

10. SUBCONTRACTING:

None of the services covered by this Contract shall be subcontracted without the prior written consent of WSAFCA, which will not be unreasonably withheld. Consultant shall be as fully responsible to WSAFCA for the negligent acts and omissions of its contractors and subcontractors, and of persons either directly or indirectly employed by them, as it is for the negligent acts and omissions of persons directly employed by Consultant.
11. ASSIGNABILITY:

Consultant shall not assign or transfer any interest in this Contract whether by assignment or novation, without the prior written consent of WSAFCA which will not be unreasonably withheld. However, claims for money due or to become due Consultant from WSAFCA under this Contract may be assigned to a financial institution, or to a trustee in bankruptcy, without such approval. Notice of any assignment or transfer whether voluntary or involuntary shall be furnished promptly to WSAFCA.

12. INTEREST IN CONTRACT:

Consultant covenants that neither it, nor any of its employees, agents, contractors, subcontractors has any interest, nor shall they acquire any interest, direct or indirect, in the subject of the Contract, nor any other interest which would conflict in any manner or degree with the performance of its services hereunder. Consultant shall make all disclosures required by WSAFCA’s conflict of interest code in accordance with the category designated by WSAFCA, unless WSAFCA’s General Manager determines in writing that Consultant’s duties are more limited in scope than is warranted by the category designated by WSAFCA code and that a narrower disclosure category should apply. Consultant also agrees to make disclosure in compliance with WSAFCA conflict of interest code if, at any time after the execution of this Contract, WSAFCA determines and notifies Consultant in writing that Consultant’s duties under this Contract warrant greater disclosure by Consultant than was originally contemplated. Consultant shall make disclosures in the time, place and manner set forth in the conflict of interest code and as directed by WSAFCA.

13. MATERIALS CONFIDENTIAL:

All of the materials prepared or assembled by Consultant pursuant to performance of this Contract are confidential and Consultant agrees that they shall not be made available to any individual or organization without the prior written approval of WSAFCA, except by court order.

14. LIABILITY OF CONSULTANT-NEGligence:

Consultant shall be responsible for performing the work under this Contract in a manner which is consistent with the generally-accepted standards of the Consultant’s profession and shall be liable for its own negligence and the negligent acts of its employees, agents, contractors and subcontractors. WSAFCA shall have no right of control over the manner in which the work is to be done but only as to its outcome, and shall not be charged with the responsibility of preventing risk to Consultant or its employees, agents, contractors or subcontractors.

15. INDEMNITY AND LITIGATION COSTS:

Consultant shall indemnify, defend, and hold harmless WSAFCA, its officers, officials, agents, and employees and volunteers from and against any and all claims, damages, demands, liability, costs, losses and expenses, including without limitation court costs and reasonable attorneys’ fees, arising in any manner by reason of negligent acts or negligent failure to act, errors, omissions or willful misconduct incident to the performance of this Contract on the part of Consultant except such loss or damage which was caused by the active negligence, sole negligence, or willful misconduct of WSAFCA. The provisions of this paragraph shall survive termination or suspension of this Contract.

16. CONSULTANT TO PROVIDE INSURANCE:

A. Consultant shall not commence any work before obtaining, and shall maintain in force at all times during the duration and performance of this Contract, the policies of insurance specified in this Section. Such insurance must have the approval of WSAFCA as to limit, form, and amount, and shall be placed with insurers with a current A.M. Best’s rating of no less than A VII (an NR rating is acceptable
for Worker's Compensation insurance written with the State Compensation Insurance Fund of California).

B. Prior to execution of this Contract and prior to commencement of any work, the Consultant shall furnish WSAFCA with certificates of insurance and copies of endorsements providing evidence of coverage for all policies required by the Contract. The Consultant and its contractors and subcontractors shall, at their expense, maintain in effect at all times during the performance of work under the Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers and under forms of policy satisfactory to WSAFCA. The maintenance by Consultant and its contractors and subcontractors of the following coverage and limits of insurance is a material element of this Contract. The failure of Consultant or of any of its contractors or subcontractors to maintain or renew coverage or to provide evidence of renewal may be treated by WSAFCA as a material breach of this Contract. Approval of the insurance by WSAFCA shall not relieve or decrease any liability of Consultant.

1. Worker’s Compensation and Employer’s Liability Insurance

   a. Worker’s Compensation - Insurance to protect the Consultant, its contractors and subcontractors from all claims under Worker’s Compensation and Employer’s Liability Acts, including Longshoremen’s and Harbor Worker’s Act (“Acts”), if applicable. Such coverage shall be maintained, in type and amount, in strict compliance with all applicable state and Federal statutes and regulations. The Consultant shall execute a certificate in compliance with Labor Code Section 1861, on the form provided in the Contract Documents.

   b. Consultant shall provide a Waiver of Subrogation endorsement in favor of WSAFCA, its officers, officials, employees, agents and volunteers for losses arising from work performed by the Consultant.

2. Commercial General Liability Insurance

   a. The insurance shall be provided on form CG0001, or its equivalent, and shall include coverage for claims for bodily injury or property damage arising out of premises/operations, products/completed operations, contractual liability, and subconsultant’s work and personal and advertising injury resulting from actions, failures to act, or operations of the insured, or by its employees or agents, or by anyone directly or indirectly employed by the insured. The amount of insurance coverage shall not be less than $1,000,000 per occurrence and $2,000,000 general and products/completed operations aggregates.

   b. The commercial general liability insurance shall also include the following:

      i. Endorsement equivalent to CG 2010 1185 naming WSAFCA, its officers, officials, employees, agents, and volunteers as additional insureds. The endorsement shall contain no special limitations on the scope of protection afforded to WSAFCA, its officers, officials, employees or volunteers.

      ii. Endorsement stating insurance provided to WSAFCA shall be primary as respects WSAFCA, its officers, officials, employees and any insurance or self insurance maintained by WSAFCA, its officers, officials, employees or volunteers shall be in excess of the Consultant’s insurance and shall not contribute with it, to the payment or satisfaction of any defense expenses, loss, or judgment.
iii. Provision or endorsement stating that the Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

3. Commercial Automobile Insurance

a. The insurance shall include, but shall not be limited to, coverage for claims for bodily injury or property damage for owned, non-owned, and hired automobiles resulting from actions, failures to act, or operations of the insured, or by its employees or agents, or by anyone directly or indirectly employed by the insured. The amount of insurance coverage shall not be less than $1,000,000 per accident.

b. The commercial automobile insurance shall include the same endorsements required for the commercial general liability policy (see Section 16.B.2.b).

4. Professional Liability. The Consultant and its contractors and subcontractors shall secure and maintain in full force, during the term of this Contract and for five years thereafter, professional liability insurance policies appropriate to the respective professions and the work to be performed as specified in this Contract. The limits of such professional liability insurance coverage shall not be less than $1,000,000 per claim.

C. In addition to any other remedy WSAFCA may have, if Consultant fails to maintain the insurance coverage as required in this Section, WSAFCA may obtain such insurance coverage as is not being maintained, in form and amount substantially the same as is required herein, and WSAFCA may deduct the cost of such insurance from any amounts due or which may become due Consultant under this Contract.

D. No policy required by this Contract shall be suspended, cancelled, terminated by either party, or reduced in coverage or in limits unless Consultant has provided thirty (30) days prior written notice by certified mail, return receipt requested, to WSAFCA.

E. Any deductibles or self-insured retentions in excess of $10,000 must be declared to, and approved by, WSAFCA.

F. The requirement as to types, limits, and WSAFCA's approval of insurance coverage to be maintained by Consultant are not intended to, and shall not in any manner, limit or qualify the liabilities and obligations assumed by Consultant under the Contract.

17. MISCELLANEOUS PROVISIONS:

A. Consultant shall keep itself fully informed of, shall observe and comply with, and shall cause any and all persons, firms or corporations employed by it or under its control to observe and comply with, applicable federal, state, county and municipal laws, ordinances, regulations, orders and decrees which in any manner affect those engaged or employed on the work described by this Contract or the materials used or which in any way affect the conduct of the work.

B. Consultant shall not engage in unlawful employment discrimination. Such unlawful employment discrimination includes, but is not limited to, employment discrimination based upon a person's race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, gender, citizenship, or sexual orientation.

C. Consultant shall maintain and make available for inspection by WSAFCA and its auditors accurate records of all of its costs, disbursements and receipts with respect to any work under this
Contract. Such inspections may be made during regular office hours at any time until six (6) months after the final payments under this Contract are made to the Consultant.

D. This Contract constitutes the entire agreement between the parties relative to the services specified herein and no modification hereof shall be effective unless and until such modification is evidenced by a writing signed by both parties to this Contract. There are no understandings, agreements, conditions, representations, warranties or promises, with respect to this Contract, except those contained in or referred to in the writing.

E. All notices that are required to be given by one party to the other under this Contract shall be in writing and shall be deemed to have been given if delivered personally or enclosed in a properly addressed envelope and deposited in a United States Post Office for delivery by registered or certified mail addressed to the parties at the following addresses:

WSAFCA: Greg Fabun
Flood Protection Manager
1110 West Capitol Avenue
West Sacramento, CA 95691

Consultant: Eric Nagy, PE
1771 Tribute Road, Suite A
Sacramento, CA 95815
F. This Contract shall be interpreted and governed by the laws of the State of California.

G. Any action arising out of this Contract shall be brought in Yolo County, California, regardless of where else venue may lie.

H. In any action brought by either party to enforce the terms of this Contract, each party shall be bear responsibility for its attorney's fees and all costs regardless of whether one party is determined to be the prevailing party.

WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

By: ________________________
    William Denton, President

ATTEST:

By: ________________________
    Kenneth A. Ruzich, WSAFCA Secretary

APPROVED AS TO FORM:

By: ________________________
    James M. Day, Jr., WSAFCA Attorney

By: ________________________
    Phillip A. Wright, WSAFCA Treasurer

MBK ENGINEERS

By: ________________________
    Ric Reinhardt, PE, Principal
CERTIFICATE OF COMPLIANCE WITH LABOR CODE § 3700

[Labor Code § 1861]

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

CONSULTANTS

By:________________________________________

Ric Reinhardt, PE, Principal
EXHIBIT B
Schedule of Performance

1. The work identified in the Proposal for Services in Exhibit “A” shall be performed in accordance with the Cost Proposal, also contained in Exhibit A, with compensation limited to the total amounts proposed for YEAR 1 and YEAR 2 as indicated.

2. Successful execution of the West Sacramento Levee Improvement Program and completion of the Sacramento River-Southport Early Implementation project rely, in part, on requirements and deadlines imposed by the State of California (State) and Department of Water Resources (DWR). Additionally, the State’s and DWR’s program objectives may evolve and influence WSAFCA’s financial strategies and planning. As such, the consultant agrees to provide work product in a professionally timely manner and that, as possible, is responsive to the State’s, DWR’s and WSAFCA’s requirements.

3. Work product shall be provided in formats that provide WSAFCA staff ability to edit, format, and alter as needed to meet WSAFCA objectives for the WSLIP and SPEIP.

4. Consultant shall monitor expenditures by task and notify WSAFCA at least 45 days prior to budget shortfalls.
Consultant Questionnaire

Definition of a Consultant is found in Section 18702 of Regulations of the Fair Political Practices Commission, Title 2, division 6 of the California Code of Regulations.

Consultants, as defined by Section 18701, are required to file an Economic Interest Statement (Form 700) within 30 days of signing a Consultant Agreement with the City, on an annual basis thereafter if the contract is still in place, and within 30 days of completion of the contract.

Company Name_________________________________ (Agreement Date)
Name of Consultant*_________________________________ (First Name) (Middle Initial) (Last Name) Phone__________________________
Company address______________________________________________________________
City, State, Zip_______________________________________________________________
Contracting City Dept.__________________________________________________________
Estimated Date of Project Completion____________________________________________________

A. Will consultant make governmental decision whether to

1. Approve a rate, rule, or regulation? Yes □ No □
2. Adopt or enforce a law? Yes □ No □
3. Issue, deny, suspend, or revoke any permit, license, application, certificate, approval, order, or similar authorization or entitlement? Yes □ No □
4. Authorize the agency to enter into, modify, or renew a contract provided it is the type of contract which requires agency approval? Yes □ No □
5. Grant agency approval to a contract which requires agency approval and in which the agency is a party or to the specifications for such a contract? Yes □ No □
6. Grant agency approval to a plan, design, report, study, or similar item? Yes □ No □
7. Adopt, or grant agency approval of, policies, standards, or guidelines for the agency, or for any subdivision thereof? Yes □ No □

B. Will the consultant serve in a staff capacity with the City and in that capacity perform the same or substantially all the same duties for the City that would otherwise be performed by an individual holding a position specified in the City’s Conflict of Interest Code? Yes □ No □

Will consultant manage public investments? Yes □ No □

Name of Person Completing Questionnaire____________________ Date____________________

*If other individuals will be working on the contract, a form should be completed for each person to determine filing obligation.
**OBJECTIVE**

The objective of this report is to provide sufficient information to the West Sacramento Area Flood Control Agency (WSAFCA) Board of Directors to approve the contract amendments to the HDR Engineering, Douglas Environmental and Kearns and West contracts related to the Lower Sacramento/Delta North (LS/DN) Regional Flood Management Plan (RFMP).

**RECOMMENDED ACTIONS**

Staff respectfully recommends that the WSAFCA Board:

1. Approve Amendment No. 2 to the HDR Engineering contract for $94,700;
2. Approve Amendment No. 2 to the Douglas Environmental contract for $44,180; and
3. Approve Amendment No. 2 to the Kearns and West contract for $10,000.
4. Authorize the General Manager to execute the above contract amendments?

**BACKGROUND**

On October 11, 2012, the WSAFCA Board approved Resolution 12-10-01, authorizing submission of a grant funding application to the Department of Water Resources for the Lower Sacramento/Delta North Regional Flood Management Plan. On November 8, 2012, a funding application was submitted to the Flood SAFE Program Management Office for $1.735M. Submission of the funding application was a collaborative effort, largely completed with the assistance of MBK, HDR Engineering, and WSAFCA. WSAFCA staff and consultants coordinated with the other local agencies in the region about grant administration and planning process governance and agreed to have WSAFCA designated as the grant applicant for the Lower Sacramento/Delta North Regional Flood Management Plan. WSAFCA received a letter of commitment from DWR on 01/29/2013 for $1.5M in grant funding to commence the RFMP work scope.

During the grant submission and approval process, DWR offered to fund a Yolo County Governance Study to develop a process and framework for local maintaining agencies to improve flood protection planning, operations and maintenance and project implementation in Yolo County as part of the RFMP. A separate scope of work and budget was submitted and accepted by DWR and the WSAFCA board approved contract amendments for HDR Engineering and MBK Engineers in support of that effort.

This past spring, as HDR was working on the final stage of the regional plan, there was concern that there wasn’t enough budget remaining to complete the report. The Flood Protect Planning and Development Team (PDT) met with our DWR project representative to discuss additional funding (contingency) to complete the report and present it to stakeholders in the region. Additionally, we discussed the work that had been underway to develop an integrated water management plan that would address head-on some of the issues that have prevented greater participation and collaboration with regional stakeholders.
ANALYSIS
The Lower Sacramento/North Delta RFMP team submitted a scope of work to DWR under the approved contingency budget for $163,775 to complete the Flood Protect RFMP, present it to stakeholders in the region, continue coordinating with the DWR Sacramento River Basin-Wide Feasibility Study (BWFS) Team to ensure that proposed regional and system improvements are coordinated and integrated with the Integrated Water Management Plan developed by members of our team, and update our RFMP as necessary based on the continued development of the BWFS. The contingency budget will fund a portion of the Yolo By-Pass/Cache Slough Integrated Water Management Plan, which will serve as a blueprint for integrating agricultural land needs with flood protection and ecological benefits in the Yolo Bypass and Cache Slough basin.

There are three contract amendments that are needed to allocate the contingency funds to RFMP contractors. HDR is the lead consultant contractor and has been responsible for coordinating the RFMP efforts and producing the report. An additional $94,700 is requested for HDR Engineering to produce paper copies of the report (over 800 pages), present the report and meet with regional stakeholders, and coordinate efforts of this team with DWR’s Basin Wide Feasibility Study and other active planning initiatives in the Lower Sacramento/North Delta region. Douglas Environmental is the lead environmental contractor for the Integrated Water Management Plan and will be coordinating with other agencies and environmental stakeholders in the Yolo Bypass as current state and federal studies (such as BDCP, BiOp, and Conservation Strategy) continue to develop and potentially impact our plan. The budget amendment to the Douglas Environmental Contract is $44,180 and involves the work of a number of Yolo County environmental stakeholders to develop a workable integrated water management plan. Kearns and West has played an instrumental role in facilitating public releases of the RFMP and coordinating with regional stakeholders. This contract amendment and budget adjustment is necessary to continue outreach and coordination activities, which has helped raise awareness of localized problems and increased participation in the development of the Flood Protect Regional Flood Management Plan.

<table>
<thead>
<tr>
<th>Contractor</th>
<th>HDR Engineering</th>
<th>Douglas Environmental</th>
<th>Kearns and West</th>
<th>WSAFCA</th>
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</thead>
<tbody>
<tr>
<td>Hours</td>
<td>485</td>
<td>372</td>
<td>70</td>
<td>124</td>
</tr>
<tr>
<td>Budget</td>
<td>$94,700</td>
<td>$44,180</td>
<td>$10,000</td>
<td>$14,895</td>
</tr>
</tbody>
</table>

All of the work and activities for these contract amendments is reimbursable through the DWR Agreement. A copy of the letter authorizing the contingency funding is attached.

Alternatives
1. Approve Amendment No. 2 to the HDR Engineering contract for $94,700; Amendment No. 2 for Dougals Environmental for $44,180; and $10,000 for Kearns and West to fund additional outreach, report production and the IWMP.
2. Approve the HDR Engineering and/or Douglas Environmental, and/or Kearns and West contracts with modifications. This is not recommended because the contingency budget for the RFMP has been approved by DWR, based on a budget and scope of work that was accepted by DWR.
3. Deny approval of the contract amendments and decline to authorize the General Manager to execute the contract amendments. This alternative is not recommended because public outreach efforts are being planned for the release of the final RFMP.
4. Initiate a new solicitation for providing project management services, developing the IWMP as well as coordinating additional outreach for the RFMP and continuing to update it. This is not recommended because of the time delay to solicit new contractors and a change would require a steep education effort for a new consultant to get up to speed with the project.
Coordination and Review
This report was coordinated with WSAFCA staff, flood protection program management consultants and the WSAFCA Treasurer.

Budget/Cost Impact
This action will defray costs of administering and participating in DWR’s regional flood management planning process. Additionally, these contract amendments are consistent with the DWR RFMP Agreement and necessary for work to start, which is fully reimbursable.

ATTACHMENTS
1. Contingency Fund Authorization Letter
2. Amendment No. 2 for HDR Engineering, Inc.
3. Amendment No.2 for Douglas Environmental
4. Amendment No.2 for Kearns and West
June 5, 2014

Ken Ruzich  
General Manager  
West Sacramento Area Flood Control Agency  
1110 W Capitol Avenue  
West Sacramento, CA 95691  

Re: Lower Sacramento River/Delta North RFMP Request for Commitment Increase, DWR Agreement No. 4600010045

Dear Mr. Ruzich,

The Department of Water Resources (DWR) received your request on May 28, 2014 for additional funding to complete the Lower Sacramento River/Delta North Regional Flood Management Plan (RFMP). DWR received the budget detail sheet for the requested increase on June 3, 2014.

As stated in Paragraph 28 of Directed Funding Agreement No. 4600010045:

"The State may, without requiring an amendment to this Agreement, increase the State Agreement Commitment set forth in Paragraph 4 by up to ten percent (10%) if changes in the scope of the Overall Work Plan, agreed to by the parties, require such increase. A request for an increase in the State Agreement Commitment is not effective unless and until specifically approved by the State's Project Manager in writing."

Based on an original contract amount of $1,649,969.40, an increase in the amount of $164,997 is available.

We have reviewed your request and find your justification consistent with the terms and intent of the Agreement and therefore approve your request for $163,775. We anticipate the additional funds will be utilized to complete the RFMP per the scope of the Agreement by early July 2014 and add the Yolo Bypass/Cache Slough Integrated Water Management Plan.

If you have any questions or need additional information, please call me at (916) 574-2550.

Sincerely,

Jeremy Arrich, Chief  
Central Valley Flood Planning Office
This Amendment No. 2 to the Contract for Services between the West Sacramento Flood Control Agency (Agency) and HDR Engineering, Inc. (Consultant), dated March 14, 2013, is made and entered into this 14th day of August, 2014.

RECATALS

WHEREAS, the Agency and Consultant executed an Agreement for consulting services for the Lower Sacramento/North Delta Regional Flood Management Plan (RFMP); and,

WHEREAS, on March 14, 2013, WSAFCA approved Contract Amendment No. 1 for project management services for the Yolo County Governance Study; and

WHEREAS, Consultant has completed the final draft Flood Protect Regional Flood Management Plan for the Lower Sacramento/North Delta Region; and

WHEREAS, the Department of Water Resources has approved contingency funding in the amount of $163,775.00 for Flood Protect to continue work initiated through the Lower Sacramento/North Delta RFMP; and

WHEREAS, the City and Consultant desire to amend said contract.

NOW, THEREFORE, IT IS MUTUALLY AGREED by parties hereto to amend said agreement as follows:

I. COMPENSATION:
   a. The compensation as set forth in the Contract for Services dated March 14, 2013, shall be revised to reflect the following:
      
      b. The compensation is increased by an additional $94,700.00 for project management services, public outreach to regional stakeholders and advancing concepts and plans for critical levee improvements for a total compensation amount of Five-hundred and Eighty-seven Thousand, Six-hundred and Thirty-five Dollars ($682,335.00)

II. TERM OF CONTRACT: The term of the Contract shall be extended to January 31, 2015.

III. EFFECT OF AMENDMENT:
Except as expressly amended herein the March 14, 2013 Contract for Services is in full force and effect.

IN WITNESS WHEREOF the parties hereto have executed this Amendment as the date herein set forth.

HDR ENGINEERING, INC.

By: ______________________________
    Robert Boling, Sr. Vice President

CITY OF WEST SACRAMENTO

By: ______________________________
    Ken Ruzich, General Manager

ATTEST:

By: ______________________________
    James M. Day, Jr.

Attest:

By: ______________________________
    Philip A. Wright
AMENDMENT NO. 2

to the

CONTRACT FOR SERVICES

between the

WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

and

DOUGLAS ENVIRONMENTAL

Dated April 11, 2012

This Amendment No. 2 to the Contract for Services between the West Sacramento Area Flood Control Agency and Douglas Environmental, dated February 1, 2013 (“Contract”), is made and entered into this 14th day of August, 2014.

RECITALS

WHEREAS, the Agency and Consultant executed an Agreement for consulting services for the Lower Sacramento/North Delta Regional Flood Management Plan (RFMP); and,

WHEREAS, on April 11, 2013, WSAFCA approved Contract Amendment No. 1 for environmental consulting services related to the RFMP; and

WHEREAS, the Department of Water Resources has approved a contingency budget to fulfill action items that have emanated from the RFMP, such as the Integrated Water Management Plan (IWMP); and

WHEREAS, the Douglas Environmental has been instrumental in the development of the IWMP and will continue to meet and work with property owners, local government and other regional stakeholders to advance the IWMP

WHEREAS, the Agency and Consultant desire to amend said contract.

NOW, THEREFORE, IT IS MUTUALLY AGREED by parties hereto to amend said agreement as follows:

I. SCOPE OF SERVICES:
The scope of services as set forth in the Contract shall remain in full effect.

II. TERM OF CONTRACT: The term of the Contract shall be extended to January 31, 2015

III. COMPENSATION: 
The compensation is increased by $44,180.00 for a total adjusted compensation of $180,330.00 to perform the scope of work for the duration of the contract.

IV. EFFECT OF AMENDMENT:
Except as expressly amended herein, the February 1, 2013 Contract for Services is in full force and effect.
IN WITNESS WHEREOF the parties hereto have executed this Amendment as the date herein set forth.

WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

By: ____________________________________________
    Kenneth A. Ruzich, WSAFCA General Manager

Douglas Environmental

By: ____________________________________________
    Doug Brown

APPROVED AS TO FORM

By: ____________________________________________
    James M. Day, Jr., WSAFCA Attorney

By: ____________________________________________
    Philip A. Wright, Treasurer
OBJECTIVE
The objective of this report is to provide the West Sacramento Area Flood Control Agency (WSAFCA) Board sufficient information to approve a contract amendment for SCS Engineers in support of additional Phase II assessment and to develop a Corrective Action Plan for the Sacramento River Southport Early Implementation Project.

RECOMMENDED ACTIONS
Staff respectfully recommends that the WSAFCA Board:
1. Approve Contract Amendment #3 for $60,665 for SCS Engineers to implement stage 3 of the Phase II investigation and to develop a Corrective Action Plan, and authorize the General Manager to execute the amendment; and
2. Authorize the General Manager to approve minor change orders up to 10% of the Contract Amendment No. 3 ($6,066) for additional borings or modifications to the Corrective Action Plan, if necessary.

BACKGROUND
SCS Engineers was hired to conduct environmental assessment services for the Southport EIP, Rivers and I Street EIPs in support of real estate transactions. During geotechnical investigations for the Southport EIP, a site along the Sacramento River near Linden Road was identified as having possible petroleum contamination. SCS Engineers conducted an initial site investigation in April and through some additional research was able to determine that this site was the location of an above ground storage tank (AST) facility between the 1950s and 1970s. An initial Phase II investigation was conducted in May and consisted of 10 discrete borings at the subject site. Boring locations were based on an aerial photograph that illustrated where each of the former ASTs were sited. Soil samples were taken from the ground surface to 30 feet below ground surface, generally in five foot segments.

The results from the soil and ground water sampling indicated that there were petroleum related impacts to soil and that additional investigative work was necessary. In June 2014, the Board approved a contract amendment for SCS Engineers to execute a Phase II workplan, consisting of 35 borings for additional soil samples and establishment of five ground water monitoring wells. SCS Engineers executed the Phase II investigation, sampling at 37 locations in a grid pattern and developed 5 ground water monitoring wells (see exhibit 1). The two additional borings were conducted on the adjacent property at the request of staff because field results indicated that there was a strong likelihood that the contaminants were not confined to a single parcel. Groundwater samples were conducted following the establishment of the wells. Groundwater sampling and analysis indicates that the highest concentrations of Volatile Organic Compounds (VOCs) were encountered in MW 4, located along the southeastern corner of the property; no VOCs were detected in MW 1, 2, or 5. The results from this second course of Phase II evaluations further supports the original assumptions that the highest concentrations of contaminants are along the levee berm, close to the southern
property line.

**ANALYSIS**

SCS Engineers developed and presented a Stage 3 workplan and budget to conduct a third Phase II site investigation to delineate impacts from a suspected petroleum release. The cost estimate for this additional investigation is $33,165. This Phase II investigation will include eight new borings to collect soil samples and potentially develop additional ground water monitoring wells. Groundwater wells will only be established if field results indicate that the affects to groundwater require further analysis. The soil samples will be obtained using a direct push drilling rig and will be field tested for consideration for additional laboratory analysis. The groundwater wells will be established in accordance with environmental procedures and permitting requirements from Yolo County Environmental Health. Soil and water samples will be sent to a California approved laboratory for analysis of petroleum and petroleum byproducts, including metals. This investigation is needed to delineate the impacts to soil and groundwater and to develop a corrective action plan.

Staff is also requesting that the Board approve $27,500 for SCS Engineers to develop a corrective action plan. The corrective action plan will describe the impacts to soils and groundwater, describe site and project constraints, identify cleanup objectives and regulatory requirements, and propose cleanup measures that could be undertaken to remediate the impacts. This budget amount will also fund preparation of design drawings and an engineer’s estimate for remedial efforts.

Staff met with State Water Board personnel to discuss the preliminary results and how WSAFCA and the State can work together to conduct the necessary investigation and remediation and achieve cost recovery from the responsible party. The State sent letters to property owners, including TOC holdings, the former AST operator of the site, requesting that they enter into a reimbursement agreement and submit a site workplan. The Water Board staff will support WSAFCA where possible, but also recognize that we are working diligently to characterize and remediate suspected contaminants that could interfere with the levee improvement project.

**Alternatives**

1. Staff recommends that the WSAFCA board approve Amendment #3 to the Professional Services Contract with SCS Engineers for $60,665 to perform the necessary environmental Phase II investigation and develop a corrective action plan (CAP) and authorize the general manager to execute the agreement and authority to spend up to 10% of this contract amendment for contingency purposes.

2. The Board may choose to approve contract amendment #3 for additional Phase II environmental assessment services and not approve the budget amount for developing the CAP. This is not recommended because a CAP will be needed to present to the Water Board for regulatory approval.

3. The Board may choose to not approve the contract amendment or the appropriation for CAP development; however, this is not recommended because we need to ensure construction worker safety during construction and this site location is coincident with the planned levee improvements.

4. The Board may request that staff issue a new Request for Proposal.

**Coordination and Review**

This report was coordinated with WSAFCA staff, WSAFCA Counsel and the WSAFCA Treasurer.

**Budget/Cost Impact**

This contract amendment will increase SCS Engineer’s contract by $69,085, which will be funded by local bond proceeds and State DWR design agreement funding; however staff will be seeking reimbursement from the responsible party.
SCS Engineers Contract Amendment #3
August 14, 2014
Page 3

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tr>
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<td>Contract Amendment No. 2</td>
<td>$ 99,849</td>
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<td>Contract Amendment No. 3</td>
<td>$ 60,665</td>
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<td>Total Contract Amount</td>
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**ATTACHMENTS**

1. Figure 1
2. SCS Contract Amendment #3
AMENDMENT NO. 3

to the

CONTRACT FOR SERVICES

between the

WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

and

SCS Engineers

Dated April 12, 2012

This Amendment No. 3 to the Contract for Services between the West Sacramento Area Flood Control Agency and SCS Engineers, dated April 12, 2012 (“Contract”), is made and entered into this 14th day of August, 2014. Except as expressly amended herein, the April 12, 2012 Contract for Services is in full force and effect.

RECITALS

WHEREAS, on April 12, 2012, WSAFCA and Consultant executed an Agreement for Environmental Assessment and Consulting Services for the Sacramento River Southport Early Implementation Project (SRSEIP), and

WHEREAS, on November 14, 2013, WSAFCA approved Contract Amendment No. 1 for Phase I assessment services for $221,250, and

WHEREAS, on June 12, 2014, WSAFCA approved a Contract Amendment No. 2 for $99,849 for Phase II services to investigate a potential release of petroleum products and the impacts to soil and groundwater; and

WHEREAS, additional investigation and delineation of impacted soils and water need to be completed to develop a corrective action plan; and

WHEREAS, SCS Engineers has presented a stage 3, Phase II workplan and budget to conduct the next stage of work for $60,665.

WHEREAS, the Agency and Consultant desire to amend said contract.

NOW, THEREFORE, IT IS MUTUALLY AGREED by parties hereto to amend said agreement as follows:
Amendment to SCS Engineers
August 14, 2014
Page 2

I. **TERM OF CONTRACT:** The term of the Contract is amended to read that this contract shall terminate on April 12, 2015, unless amended prior to the expiration date.

II. **COMPENSATION:**
The compensation shall increase by $60,665.00.

III. **EFFECT OF AMENDMENT:**
Except as expressly amended herein, the April 12, 2012 Contract is in full force and effect.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as the date herein set forth.

WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

By: ____________________________________________
   Kenneth A. Ruzich, WSAFCA General Manager

SCS Engineers

By: ____________________________________________
   Dan Johnson, Vice President

APPROVED AS TO FORM

By: ____________________________________________
   James M. Day, Jr., WSAFCA Attorney

By: ____________________________________________
   Philip A. Wright, Treasurer
OBJECTIVE
To approve Amendment No. 4 to Task Order No. 4 in support of the design services contract with HDR Engineering, Inc. for the Sacramento River Southport Early Implementation Project (SRSEIP).

RECOMMENDED ACTION
It is respectfully recommended that the JPA Board:

1. Approve Amendment No. 4 to Task Order No. 4 of the design services contract with HDR Engineering, Inc. for the SRSEIP in the amount of $2,384,646;
2. Approve Amendment No. 2 to the Indefinite Delivery-Indefinite Quantity (ID-IQ) Contract with HDR Engineering Inc. to increase the contract limit from $15,678,138 to $17,695,500 to be able to fully fund the remaining design services, including environmental documentation, necessary to bring design to completion and move the project into the construction phase; and
3. Authorize an additional appropriation of $2,017,362 to the SRSEIP Work Order No. 41164 to support the above recommended actions.

BACKGROUND
On August 12, 2010 WSAFCA executed a contract with HDR Engineering, Inc. (HDR) to provide design services for the Sacramento River Southport Early Implementation Project. The value of this contract was set at $14,430,000 based on the proposal dated July 30, 2010 provided by HDR titled Sacramento River – Southport Early Implementation Project, Design Services Contract Proposal for the City of West Sacramento. The existing conditions, adjacent vegetation and land-use, overall length (5.6 miles), and location within the Sacramento River Flood Control Project make the Sacramento River South Levee a very challenging segment of levee to undertake. This, combined with the broad range of potential levee alignments and project phasing options, made the development of a detailed and complete scope of work for the entire design phase of the project extremely challenging. As a result, an Indefinite Delivery-Indefinite Quantity Contract was executed that allows for the development of individual task orders that accurately describe and scope discrete portions of the design process for review and approval by WSAFCA and the City prior to the commencement of each project phase and associated work products.

A total of 4 Task Orders have been issued to date for the ID-IQ Contract with HDR. Task Orders 1, 2, and 3, which included interim preliminary design, final preliminary design, and project design, were completed with the delivery of their associated design reports.

Task Order No. 4, final project design, was issued on February 9, 2012, and initiated: Geotechnical and Groundwater Investigations, Civil Engineering and Analysis, Environmental Documentation (up to the public draft EIS-EIR only), Geomorphic Investigations, Quality Management, and Project Management.
As noted by the project team from the onset of design; the existing conditions, adjacent vegetation and land-use, overall project length (5.6 miles), and location within the Sacramento River Flood Control Project, make the Sacramento River South Levee a very challenging segment of levee to design. This has been confirmed throughout the design process with the selection of technically feasible solutions for addressing existing levee deficiencies, the selection of a preferred levee alignment that includes the use of a setback levee, working with affected adjacent property owners (addressing concerns), focused engineering evaluations to reduce impacts and costs, and coordinating design, environmental documentation, and permitting approval with the governing federal, state, and regulatory agencies. These efforts have made the entire design phase for the SRSEIP very challenging.

To date, a total of three amendments have been processed for TO 4. These amendments were required to cover costs of additional work that included:

- Reviewing and completing existing groundwater data and modeling of the potential impact of proposed cutoff walls might have on private groundwater wells.
- Development of plans, specifications and estimates for the relocation of RD 900 pump station (RD900 staff had indicated that the pump station function should be relocated to the Deep Water Ship Channel instead).
- Completion of a wind wave run-up evaluation, borrow area and drainage ditch topographic surveys.
- Development of technically feasible solutions that would substantively reduce impacts to residential property owners, including reducing the amount of land, borrow, and residential relocations required for the project.
- Additional borrow evaluation at the Watermark site.
- Participation in special work groups to facilitate the design process, including utilities, borrow, real estate, transportation, offset area design, and constructability.
- Additional surveys, controls, and stability/seepage evaluations.
- Sherwood Marina access embankment evaluations, roadway pavement design, and groundwater modeling of shallow cutoff wall.
- Revision of erosion control basis of design and identification of riverbank toe rock extent/location.
- Preparation of storm water pollution prevention plans for the anticipated three phases of construction.
- Preparation of additional administrative drafts (4th) of EIS/EIR triggered by USACE review and comments, including associated biological assessments.
- Development of separate plans, specifications, and estimates for the offset area for project mitigation.
- Preparation of the FESSRO grant application, in which the Project was selected to receive $5,000,000 towards the design and construction of the offset area for project mitigation.
- Design and preparation of a separate bid package for Village Parkway construction, including the extension to Gregory Avenue, including additional hydrologic and hydraulics analysis.
- Additional testing and evaluations of the Watermark and Yarborough sites to identify borrow material (type and quantity) suitable for levee construction. Because borrow material is such a major component of the levee construction cost, certainty in the amount and type of available borrow material is imperative for timely and cost effective construction of the Project.
- Additional value engineering studies in Segment A and G to further evaluate the proposed flood control measures to investigate potential for reducing impacts and cost savings.
- Evaluation (hydraulic modeling) of the inlet/outlet design for the offset areas to optimize inlet/outlet design configuration to minimize erosive potential and reduce the requirement for rock protection (major cost-saving measure), this included evaluation of alternative vegetation and erosion control measures that would reduce rock protection requirements.
- Development of a draft and final survey control report in conformance with USACE requirements.
- Development of an engineering analysis consistent with USACE Policy Guidance Letter for processing a request for variance from the vegetation standards for levees. This is needed to support retention/removal of existing woody vegetation on the existing levees in Southport.
- Response to comments and revision to project special provisions based on input from the constructability work group.
- Preparation of a 5th administrative draft of the EIS/EIR, public draft EIS/EIR and associated public meeting.
- Prepare Administrative Final EIS/EIR, Final EIS/EIR, Clean Water Act 404 Permit, Arborist Tree Impacts Permit, and USFWS 1602 Streambed Alteration Permit.
ANALYSIS

The design team completed 65% project design in early 2013 and has been working towards the delivery of the 90% design package in conjunction with approval of the Final FIR under CEQA. Adoption of the Final EIR is scheduled for the WSAFCA Board meeting in August. Recent project design efforts have been focused on refinements to achieve the primary objective of flood risk reduction for Southport and the City, while satisfying federal, State, and regulatory agency requirements. The team has continued to gather and incorporate the most current/accurate information into the design process, and modifications to the design and alignment are being evaluated for addressing regulatory agency requirements, potential reduction in impacts to properties as well as overall cost savings to the project. Current considerations and analysis is focused on cost components (e.g., real estate acquisition, borrow evaluations, structural demolition and relocation, environmental mitigation, transportation, drainage, planning, design, engineering, construction management and construction of the levee improvements) and variable State cost-share scenarios for the different project components.

The WSAFCA consulting team is diligently working towards delivery of the construction, environmental compliance, and permitting documents for the Project. Since approval of Amendment No. 3 to TO4, unanticipated agency, regulatory, funding, and site conditions have resulted in changes to the project, requiring new and/or additional evaluations, design revisions, and environmental compliance efforts. These changes are the result of unforeseen field conditions and regulatory findings outside the control of WSAFCA and the consulting team, but none the less require new and additional efforts to advance the project. The changed conditions requiring this amendment includes the following:

- **USACE Section 408 Permit and Environmental Compliance:** The U.S. Army Corps of Engineers (USACE), during review of the 408 permit application (permission to make temporary or permanent alterations to federal public works, including levees) for the Project, expressed concerns of potential hydraulic impacts to levees adjacent to the project footprint and required additional evaluation to ensure no downstream impacts would result from the Project. Discussions with USACE staff led to several design iterations for the offset area, accompanied by hydraulic, civil design and geotechnical analyses, to satisfy the USACE that downstream surface water conditions resulting from project design would not cause adverse hydraulic impacts. This resulted in the need to consider interim offset configurations that would reduce hydraulic impacts by the Project. The interim offset configurations required multiple iterations/consistency checks for hydraulic impacts, and then incorporation into the environmental documents and permit applications.

- **State Cost Share for Interim Village Parkway:** The California Department of Water Resources (DWR) has been working with WSAFCA to determine appropriate cost share and allocation for a construction funding agreement for the Project. During review of the Project, DWR requested that a separate analysis of the Interim Village Parkway be prepared for an alignment adjacent to the new levee. This revised alignment, considered by DWR to be the appropriate replacement roadway for South River Road, is required by DWR to determine cost share, and necessary for WSAFCA staff to determine construction sequencing. Negotiation and approval of the funding agreement will require preparation of justification papers, cost opinion evaluation, and special compensability analysis by the design engineer that was not previously contemplated or scoped.

- **Changed Site Conditions:** Unforeseen hazardous material found along the Project reach will require expanded coordination on project features and elements, and may require provisions for remediation to be included as part of the Project construction plans and specifications. Investigations are currently ongoing, and findings will likely dictate changes to the Project design, environmental documentation, and permitting process.

- **Borrow Identification and Acquisition:** The Project is primarily an earthwork project and requires substantial new fill for construction. While the Project will utilize onsite borrow sources nearby the Project site as much as possible, including existing levee reaches to be removed or partially degraded, a significant amount of offsite borrow will still be needed for the Project. The need to secure offsite borrow has increased with the USACE required interim condition as described above. Maximizing local offsite borrow availability will contribute to a significant cost savings for construction of the project. The design team has been asked to expend additional effort in evaluating local borrow sources in order to achieve this goal. Once the final borrow sites are identified for the project, specific site surveys will be required.

- **Additional Effort to Prepare Final EIR/EIS:** As a result of the USACE hydraulic impact concerns and the need to consider interim offset configurations for the project, additional effort was needed to prepare the Final EIR/EIS. These efforts include adding the interim offset configuration into the Administrative Draft and Administrative Final EIS/EIR, including the reconsideration and redrafting of the environmental
impacts, modification to graphics, revisions to biological opinions and permits for the project. The extent and intensity of the public comments received during the public commenting period also necessitated the need to perform a Risk Assessment, which identified a series of items for increased scrutiny and team resolution.

In addition to the extra work necessary to address the changed conditions and regulatory findings, the proposed amendment to TO 4 also includes additional work that is to help streamline and facilitate construction of the improvements for the SPEIP.

- One major component is the modification of the offset area design to incorporate the interim condition, a design element that was required to address USACE hydraulic impact concerns, as the final project configuration. This design modification would eliminate the need to prepare separate bid documents to construct the final permanent offset area configuration as currently designed. The implementation of this change would require modification to the offset area design and the preparation of a technical addendum to the environmental document, but would save an estimated $10 Million in construction cost. The design team has been vetting this proposed modification with the USACE and regulatory agencies and is working out final details for concurrence and adoption.

- Another component is the incorporation of the Time Oil contamination site remediation plan into the project bid documents. With the recent discovery of contaminated material at the Time Oil site and the active investigation that is ongoing, it is necessary that a remediation plan be prepared and incorporated into the levee improvement bid documents to avoid potential claims and delays during construction. This work will include the participation in a working group to help map out remediation plan.

- There is also the need to develop a household hazardous material inventory for incorporation into the construction document. The consultant will also need to review and confirm Phase I and Phase II Environmental Site Assessment for possible contamination of all properties to be acquired for the project. These tasks had been identified in the original design scope of work for the project, but were never included into a Task Order approved to date.

It should be noted that some of the tasks identified in this amendment is actual work identified in the supplemental services budget approved as part of Amendment No. 3 to TO4 that did not get exercised. $387,284 of this approved supplemental services budget from Amendment No. 3 is being used to augment the additional cost for this amendment. $225,000 of the supplemental budget from Amendment No. 3, which is allocated for EIS public draft circulation and litigation support, is being retained for services potentially still needed for the project. Also approximately $140K that was budgeted in Amendment No. 3 to TO4 for processing a vegetation variance with the USACE will no longer need because USACE has advised that they would process the variance in-house. This cost savings is identified in this current amendment to TO4 fee schedule as a deduction.

Attachment 1, "Summary of Amendment No. 4 Tasks", provides an overview of all the additional tasks that are the basis for this Contract amendment. The table below provides a summary of the total cost of each task order and amendments and the status of contract capacity under the ID-IQ contract.

<table>
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<tr>
<th>Contract Task Order</th>
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<tr>
<td>Current ID-IQ Capacity</td>
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<td>Task Order No. 1</td>
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<td>Task Order No. 2</td>
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<td>Task Order No. 3</td>
<td>$2,720,464</td>
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<td>TO 3-Amendment No. 1</td>
<td>$270,727</td>
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<td>Task Order No. 4</td>
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Consideration of Approval of Amendment No. 4 for Task Order No. 4 with HDR Engineering
August 14, 2014
Page 5

<table>
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<tr>
<th>TO 4-Amendment No. 3 Authorized Supplemental Services Budget</th>
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<tr>
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<td>TO 4-Amendment No. 4</td>
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<tr>
<td>Capacity Deficit</td>
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Approval of Amendment No. 4 to Task Order 4 will allow incorporation of out of scope work and additional work into the design services contract with HDR Engineering, Inc. for the Sacramento River Southport Early Implementation Project.

**Task Order No. 4 Period of Performance**
The overall period of performance for Task Order No. 4 was originally estimated at 56 weeks and was extended to end of 2014 with the previous amendments. Given the additional efforts required to complete the remaining design work and the delay encountered in the approval of the environmental documents, the period of performance must be extended and is now estimated to end in December 2015.

**Alternatives**
Staff recommends that the JPA Board approve Amendment No. 4 to Task Order No. 4 of the design services contract with HDR Engineering, Inc. for the Sacramento River Southport Early Implementation Levee Improvement Project as presented in this report.

The Board may elect not to approve the Amendment at this time and/or may elect to rescipe the proposed services. However, the services defined in this proposed Amendment are necessary and integral for completion of design and advancing project to the construction phase.

**Budget/Cost Impact**
The design services contract with HDR Engineering, Inc. is authorized for a total amount of $15,678,136. To date, executed task orders and associated amendments have totaled $15,085,852. Approval of Amendment No. 4 to Task Order No. 4 for $2,384,646 will bring the total approved task orders and associated amendments to $17,470,498, which is beyond the authorized amount for the ID-IQ contract. With $367,284 in supplemental services identified in Amendment No. 3 to TO4 reallocated to this amendment, it will require an increase in the contract capacity of the original ID-IQ contract in the amount of $2,017,362 to fully fund this amendment and remaining work to be completed as part of project design and environmental documentation.

As shown in the table below, the design and environmental documentation (ED) costs for the Southport EIP project is still well within the range expended for recently completed levee improvement projects by WSAFCA and our regional partner across the river, Sacramento Area Flood Control Agency (SAFCA). Since the type, size, and cost of levee improvements projects are typically not the same, the comparison is being made on the design and environmental documentation costs as a percentage of construction cost.

<table>
<thead>
<tr>
<th>Levee Improvement Project (Construction method for addressing levee deficiencies)</th>
<th>Design and ED Costs</th>
<th>Construction Cost (* Estimated)</th>
<th>Design and ED Costs as percentage of Construction Cost</th>
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<tr>
<td>Southport EIP (Combination of Fix in Place, Setback Levee, and Adjacent Levee)</td>
<td>$17.7 Million</td>
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<td>CHP Academy EIP (Fix in Place)</td>
<td>$3.6 Million</td>
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<td>Rivers EIP (Fix in Place)</td>
<td>$4.2 Million</td>
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<td>SAFCA Natoma Cross Canal (Fix in Place)</td>
<td>$9.0 Million</td>
<td>$45.0 Million</td>
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WSAFCA successfully entered into a Design Funding Agreement with the State in October, 2009, whereby the State will cost share 50% with WSAFCA. Portions of the design costs are included within the Design Funding Agreement and approved amendments and will be cost shared accordingly. The balance of the project costs, plus construction support and construction management costs, will be included in the Construction Funding Agreement that is currently being negotiated with the State. As part of the approved Design Funding Agreement, the State committed to funding 50% of the design costs. Once the Construction Funding Agreement is in place and a new cost share percentage has been established, we will "true up" these costs. Staff anticipates at least a 70% (State) – 30% (WSAFCA) cost share split. This new cost share percentage would be applied to all design and construction costs for the SRSEIP.

ATTACHMENT
1) Summary of Amendment No. 4 Tasks
2) Amendment No. 4 to Task Order No. 4 Contract for Services with HDR Engineering Inc. dated February 9, 2012
3) Amendment No. 2 to Contract for Services with HDR Engineering Inc. dated August 12, 2010
## Summary of Amendment #4 Tasks

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<td><strong>Task 1 – Project Management and Design Coordination (New Scope and Increased Project Duration)</strong></td>
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<tr>
<td>In original scope, requires additional effort</td>
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<td>• Interim Condition Cost Impact Analysis ($39,706.80) • Interim Condition Strip Map, Syllabus, and Data ($85,016.40) • 90% Final Strip Map ($46,901.70) • 90% Lite Data Point ($18,280.50) • Biological Assessment Strip Map &amp; Exhibits ($31,437.00) • Engineering Support to Environmental Team ($74,671.80) • Interim &amp; Final Condition Terrain Models and Evaluations ($65,856.00) • Modifications to O&amp;M Manual ($21,621.60)</td>
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| **Task 4 – Geotechnical and Borrow Evaluations (New Scope)**

| In original scope, requires additional effort | None | None |
| **Not in original scope** | ● Borrow Suitability and Availability Support ($35,256.58) | ● Supplemental Evaluations for Improvements in Segments A, B1 and G ($88,704.00) ● Sarmento Borrow Evaluations ($82,302.73) ● Borrow Suitability and Availability Support ($105,059.12) |

| **Task 5 – Interim Village Parkway Revisions and Refinement (New Scope)**

| In original scope, requires additional effort | None | None |
| **Not in original scope** | ● IVP Alignment Revisions ($14,794.50) ● Yacht Club Access ($9,676.80) | ● Yacht Club Access ($9,928.80) ● Phase I&II Investigations ($9,408.00) |

| **Task 6 – Funding Agreement Support (New Scope)**

| In original scope, requires additional effort | None | None |
| **Not in original scope** | ● Cutoff Wall Cost Evaluations ($12,541.20) ● South River Road Evaluations to Support IVP Cost Comparison ($23,805.60) ● Pumping Plant #5 Justification ($1,018.50) ● Advanced efforts for 90%, 100% Cost Opinions ($3,028.20) | ● Cutoff Wall Cost Evaluations ($2,335.20) ● Advanced efforts for 90%, 100% Cost Opinions ($27,253.80) ● Cost and Compensability Trade-off Analyses ($24,229.80) ● Engineering Support During Agency Coordination ($11,831.40) |

| **Task 7 – Household Hazardous Materials Inventory, Specs and Cost (Partial New Scope)**

<p>| In original scope, requires additional effort | None | None |
| <strong>Not in original scope</strong> | None | None | ● Household Hazardous Materials Inventory, Specifications, and Cost Opinion ($42,756.00) |</p>
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<td>• Boundary Surveys at Sarmento and Watermark to Support Borrow Operations ($53,400.90)</td>
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This Amendment No. 4 to Task Order No. 4 Contract for Services between the West Sacramento Area Flood Control Agency (Agency) and HDR Engineering, Inc. (Consultant), is made and entered into this 14th day of August, 2014. Except as expressly amended herein, the February 9, 2012 Task Order No. 4 Contract for Services is in full force and effect.

RECITALS

WHEREAS, the Agency and Consultant executed a Contract for Design Engineering Services on August 12, 2010 for the Southport Sacramento River Early Implementation Project with services to be approved and issued on a Task Order basis; and

WHEREAS, the Agency authorized Task Order No. 4 on February 9, 2012 to begin preparation of Plans, Specifications, and Estimates and Environmental Documentation; and

WHEREAS, the Agency authorized 3 Contract Amendments to Task Order No. 4, to expand the scope of work to incorporate additional efforts needed to be complete project design and environmental documentation requested by the Agency and required for delivery of project; and

WHEREAS, during the course of continued design work under Task Order No. 4, key efforts supporting advancement of 90% design, additional studies & design feature evaluations, and environmental documentation have exceeded the resources originally built into Task Order No. 4 and approved amendments for these efforts. In addition, unanticipated agency, regulatory, funding and site conditions have resulted in changes to the project, requiring new design elements and evaluations that are identified in Exhibit “A”, “Amendment No. 4 of West Sacramento Levee Improvement Program – Sacramento River Southport Early Implementation Project Task Order No. 4” dated August 7, 2014 and must now be incorporated into the original scope of work; and

WHEREAS, the Agency and Consultant desire to amend said Task Order No. 4.

NOW, THEREFORE, IT IS MUTUALLY AGREED by parties hereto to amend said Task Order as follows:

I. SCOPE OF SERVICES:

The scope of services as set forth in the Task Order No. 4 Contract for Services dated February 9, 2012, shall be revised to reflect the following:

Include the additional services identified in Exhibit “A”, “Amendment No. 4 of West Sacramento Levee Improvement Program – Sacramento River Southport Early Implementation Project Task Order No. 4” dated August 7, 2014, and attached hereto.
II. COMPENSATION:
The compensation as set forth in Task Order No. 4 Contract for Services dated February 9, 2012, shall be revised to include the following:

The Consultant shall be paid for the actual fees, costs, and expenses for all time and materials required and expended for the additional services as directed by the Agency. Payment for said additional services shall be based on the Work Plan dated August 7, 2014 and attached as Exhibit “A”, but in no event shall total compensation for said additional services exceed Two Million Three Hundred Eighty Four Thousand Six Hundred Forty Six Dollars ($2,384,646), without Agency’s prior written approval.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as the date herein set forth.

WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

By: ________________________________
    William Denton, WSAFCA President

HDR ENGINEERING, INC.

By: ________________________________
    Holly Kennedy, P.E., Associate Vice President

APPROVED AS TO FORM

By: ________________________________
    James M. Day, Jr., WSAFCA Attorney

By: ________________________________
    Philip A. Wright, WSAFCA Treasurer
Exhibit “A”
August 7, 2014

Mr. Greg Fabun
Flood Protection Manager
1110 West Capitol Avenue
West Sacramento, California 95691

RE: Amendment #4 of West Sacramento Levee Improvement Program – Sacramento River Southport Early Implementation Project Task Order #4

Dear Mr. Fabun:

The WSAFCA consulting team is working towards delivery of the construction, environmental compliance, and permitting documents for the Southport EIP (Project). Since Amendment #3 to Task Order #4 (TO 4), several agency, regulatory, funding and site conditions have changed, requiring new evaluations, design revisions, and environmental compliance efforts. These changes are a result of field conditions and regulatory findings outside the control of WSAFCA staff, but none the less require new and additional efforts to advance the project. The changed conditions requiring this amendment are summarized as follows:

- **USACE Section 408 Permit and Environmental Compliance**: The U.S. Army Corps of Engineers (USACE), during review of the 408 permit application for the Project, expressed concern of potential hydraulic impacts and required additional evaluations to ensure that no downstream impacts would result from the Project. Discussions with USACE staff led to several design iterations for the offset area, accompanied by hydraulic, civil design and geotechnical analyses, to satisfy the USACE that downstream surface water conditions resulting from project design would not cause adverse hydraulic impacts downstream. This resulted in the need to develop an interim offset configurations that would reduce hydraulic impacts by the Project. The interim offset configurations required multiple iterations/consistency checks with environmental documents and permit applications.

- **State Cost Share for Interim Village Parkway**: The California Department of Water Resources (DWR) has been working with WSAFCA to determine appropriate cost share and allocation for a construction funding agreement for the Project. During review of the Project, DWR requested that a separate analysis of the Interim Village Parkway be prepared with an alignment adjacent to the new levee. This revised alignment of the replacement of South River Road is necessary for DWR to determine cost share, and necessary for WSAFCA staff to determine construction sequencing.

- **Changed Site Conditions**: Contamination findings along the Project reach have required new coordination on project features and elements, and may require provisions for remediation as part of the Project construction plans and specifications. Investigations are ongoing, and findings will likely dictate changes to the Project design and permitting progress.
- **Borrow Identification and Acquisition:** The Project is primarily an earthwork project and requires substantial new fill for construction. While the Project will rely on borrow sources nearby the Project site, including existing levee reaches to be removed or partially degraded, a significant amount of offsite borrow is needed for the project. Maximizing nearby borrow availability will contribute to a significant cost savings for construction of the project. The design team has been asked to expend additional effort in evaluating local borrow sources in order to achieve this goal.

- **Revised Development Plans along the Project Reach:** Development interests in the south basin have requested evaluation of additional community park space in planned developments. The location of the future park space requires evaluation, and potential revisions to the Interim Village Parkway access roads at the Yacht club.

Through continued coordination and evaluation of the offset configuration with the regulatory agencies, a phased construction approach was identified to satisfy concerns surrounding hydraulic impacts. The activities in this amendment include review, evaluation, and reporting during coordination with the regulatory agencies; evaluation of potential alternative offset configurations to eliminate the need for phased construction; and additional engineering, environmental documentation, and permitting support to implement the alternative configurations. The total deferred cost (saving) of not implementing the project in a phased construction approach is estimated\(^1\) to be between $10.7M and $12.2M.

A breakdown summary of tasks subject to this amendment request is provided in Table 1.

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\(^1\) Cost comparison based on phased construction under 65% design assumptions, compared to the 65% cost opinion.
Table 1 - Summary of Amendment #4 Tasks

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<thead>
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<td>Revise current design to incorporate single inlet/outlet offset configuration ($241,077.90)</td>
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<td>Complete Residency Time Analysis in Offset ($42,959.70)</td>
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<td>Revised Offset Geomorphic Input for TOC ($59,838.45)</td>
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Task 1. Project Management and Design Coordination

Subtask 1.1 Communication and Coordination

The following meetings will be attended for the duration of the extended period of service:

- Biweekly Project Team Meetings to be held at the City of West Sacramento (City). The Consultant will prepare agendas and minutes for each meeting.
- Weekly Consultant Team Meetings. The Consultant will prepare agendas and minutes for each meeting.
- Biweekly Design Coordination Meetings (HDR and its subconsultants plus MBK) to be held via conference call. The Consultant will prepare agendas and assemble Consultant Team progress submittals.
- Weekly HDR Civil Design Team/Production Meetings.
- Offset Area Work Group Meetings both by conference call, and at the City.
- Environmental Team Meetings to be held via conference call.
- Real Estate Meetings to be held at the City.
- Borrow Coordination Meetings to be held at the City.
- Biweekly Policy and Strategy Meetings to be held at the City.
- Constructability Workgroup Meetings to be held at the City.

In addition to these meetings and coordination, the Consultant will prepare detailed monthly progress reports to accompany invoices, and support development of up to 10 overall project schedules (as conditions change and revisions are warranted).

Assumptions:
- Period of service is extended 12 months beyond TO4 Amendment #3, for the base tasks only. Period of Performance will be through December 31, 2015. Execution of optional tasks items that may extend beyond December 31, 2015, will require additional efforts.
- There will be 6 separate Real Estate meetings.
- There will be 5 separate Borrow Coordination meetings.
- There will be 12 separate Constructability Workgroup meetings.
- There will be up to 24 Offset Workgroup Meetings
- There will be up to 15 Environmental Team Meetings

Subtask 1.2 TOC Working Group

- Attend Meetings at the City to coordinate, plan, and recommend a remediation strategy.
- Confirm regulatory and case study research prepared by others (provided by WSAFCA) with respect to construction document disclosure and liability.
Support development of topic specific papers or Technical Memoranda to document findings, rationale and recommended actions. Technical Memoranda will be led and produced by others.

Document review and comment of materials prepared by others for conformance with standard of care.

Assumptions:
- There will be 5 separate two hour Workgroup meetings at the City.

**Task 2. Offset Evaluations, Revisions, and Refinement**

Task 2 covers activities required to support discussions involving the 408 permit application. Evaluations and activities for this effort are detailed in the following subtasks.

**Subtask 2.1 Interim Condition Cost Impact Analysis**

The Consultant will prepare Draft, Revised Draft, and Final Draft of Phased Development Hydraulic Impact Analysis – Cost Impact Memorandum in support of MBK white paper on interim condition costs and benefits. This effort includes review and comment on white papers prepared by MBK, development of costs for alternative offset scenarios, development of figures to support white paper and TM development, and meeting with the USACE and WSAFCA to present findings to address requirements and/or concerns raised by the USACE.

**Subtask 2.2 Interim Condition Strip Map, Syllabus, and Data**

Interim condition consists of 65% design with inclusion of N2 and S3 Inlet/Outlets (I/Os), heterogeneity features, cellular berms, and culverts. The Consultant will provide the following activities under Subtask 2.2:

- Develop terrain model for heterogeneity and cellular berms.
- Prepare area and volume calculations for heterogeneity and cellular berm features.
- Estimate the volume of material to be excavated from each I/O.
- Prepare earthwork mass balance calculations for deferred opening of inlet outlets and construction of heterogeneity and cellular berm features.
- Prepare offset are maps, volumes, areas, design syllabus.
- Develop tabulated representation of areas and volumes for team evaluation.
- Evaluate and design interim discharge pipes for cellular offset configuration.
- Prepare an Inventory and Rationale TM of I/O configurations for use in evaluating Project opportunities.

**Subtask 2.3 90% Final Strip Map**

The 90% condition consists of flow-through condition with narrowed I/O configuration, adjacent levees changed to Slurry Cutoff Wall in Segments A, B1 and G, removed rock rip
rap in A, B1, and toe rock along remnant levee added. The Consultant will provide 2 revisions to the 90% strip map to reflect revisions to the Interim Village Parkway alignment. The Consultant will prepare a project syllabus to support and document the 90% final condition.

**Subtask 2.4  90 Percent Lite Data Point for Environmental Documents**

The 90% Lite Data Point consists of the 65% I/O configuration (un-narrowed), but adjacent levees changed to Slurry Cutoff Wall, no rock in A, B1, and toe rock along remnant levee added. No heterogeneity is included in the 90% Lite Data point. The Consultant will prepare a strip map, cross sections, and quantities. The Consultant will prepare a project syllabus to support and document the 90 Percent Lite condition.

**Subtask 2.5  Biological Assessment (BA) Strip Map and Exhibit Development**

The BA Strip Map and Exhibits are based on 90% Lite, but with heterogeneity features included. The Consultant will provide the following activities:

- Plan view with section call-outs (cut/fill, erosion control features).
- I/O specific exhibits to conform geomorphic conceptual design to civil terrain model.
- Revised toe rock configurations based on geomorphic recommendations.

**Subtask 2.6  Engineering Support to Environmental Team**

The Consultant will support the environmental team during development of environmental document and permit iterations and response to regulatory agencies. Engineering support activities detailed below are a result of regulatory coordination, and environmental documentation and permitting beyond the original scope of services and amendments. These activities include:

- Mitigation plan support.
- Swainsons Hawk/Tree impact evaluations.
- Schedule and feasibility support to offset decision timing process.
- Establish mitigation/civil design footprint in support tree mitigation.
- Draft letter and Exhibit describing RD 900’s position for erosion protection on the existing levee in Segments C, D, E and F.
- Support preparation a Deep Wall Screening Memo.
- Evaluate area of borrow disturbance by construction phase.
- Response to comments related to a Segment F slurry wall.
- Prepare inlet vegetation survey and Technical Memoranda.
- Provide inlet Riprap Condition Assessment.
- Complete SAM analyses to support design refinement iterations.
- Provide geomorphic input to inform offset refinement.
- Support for future iterations of environmental work that may include continued refinements to currently proposed project features, including but not limited to offset and I/O conditions, including providing descriptions and metrics for design elements.

**Subtask 2.7 Interim and Final Condition Digital Terrain Model and Volume evaluations**

The Consultant will develop an interim and final condition digital terrain model to support offset area modelling for use in 408 application discussions with the USACE and refinement of project features to address concern of downstream impacts. Activities will include:

- Support for hydraulic modeling with terrain model of final condition for flow-through configuration with heterogeneity, cellular berms and reduced I/O widths.
- Consider civil design feasibility of constructing the terrain features at a later date when deferred I/O’s constructed.
- Evaluate cost feasibility.
- Develop terrain model for the offset areas, which will require revision to model final flow condition and I/O configuration.

**Subtask 2.8 Modification to Project O&M Manual**

The Consultant will coordinate with WSAFCA to develop required O&M actions and frequency of actions to satisfy WSAFCA, RD 900, DWR, and USACE requirements. The Consultant will provide engineering support for the O&M manual, including development of quantities, exhibits, and cost opinions.

**Task 3. Revise Offset Design Configuration Along Existing Alignment**

**Subtask 3.1 Single I/O Configuration**

The Consultant will revise the offset area design configuration to a single I/O configuration, to include the following activities:

- Revise all design elements to single I/O configuration in each offset area.
- Modify topographic heterogeneity in offset.
- I/O dimensions will be reevaluated.
- Re-evaluate available offset area and existing levee degrade borrow material.
- Tabulate summary of revised earthwork mass balance resulting from noted revisions.
- Support internal and public meetings.
- Respond to comments on public draft (support from engineering team).
- Support mitigation monitoring program development (support from engineering team).
- Revise erosion control design for single inlet configuration.
- Prepare Technical Memoranda documenting analyses and findings.
• Complete geomorphic evaluations to support final design, including Technical Memoranda to document results and findings. These activities are in addition to those already performed for the 65% design condition, and are necessary for a single I/O configuration as geomorphic conditions are affected by the location, dimensions, and number of I/Os.
• Attend additional meetings associated with execution of this optional task (team meetings, offset meetings, environmental stakeholder meetings)

**Subtask 3.2  Residency Time Analysis**

Regulatory agencies may request quantification of hydraulic residency as it relates to ecological function for the offset design. In Subtask 3.2, the Consultant will prepare offset residency time analyses for any changed I/O configurations to support regulatory approval.

**Subtask 3.3  Revised Offset Configuration - TOC**

If the offset configuration requires revisions as a result of TOC site conditions, the Consultant will need to provide additional geomorphic input to final design based on potential site changes and configuration in the north offset area.

Assumptions: Current terrain model is 90% lite.

**Task 4.  Geotechnical and Borrow Evaluations**

Task 3 activities are required to further identify sources of borrow, suitability of borrow, availability of borrow, and acceptability with regulatory agencies.

**Subtask 4.1  Supplemental Evaluations for Levee Improvements in Segments A, B1, and G**

The Consultant will provide the following activities required under Subtask 5.1, which are as follows:

• Identify up to two critical sections in segments A, B1 and G.
• Model critical section(s) to gain confidence that cutoff wall with seepage berm is adequate levee improvement.
• Re-evaluate required berm width in Segment B1 with Slurry Cutoff Wall change and 2 to 1 side slopes.
• Provide senior advisor support and coordination with regulatory agencies.
• Prepare draft and final technical memorandum for review and concurrence with USACE prior to finalization of 90% design documents.
• Complete independent technical review.
• Revise geotechnical plans and profiles based on revised sections.
• Prepare the (revised) 90% Geotechnical design Report based on the findings.
Assumption: The noted evaluations are preliminary and will need to be confirmed with final 90% design geometry, embankment zoning, and design water surface elevations.

**Subtask 4.2  Sarmento Borrow Evaluation**

The Consultant will support activities to further refine borrow opportunities at Sarmento. These activities will include:

- Soil borings and evaluations to characterize source.
- Borrow TM to estimate the unit cost to develop the site.
- Prepare cost estimate of source development.

**Subtask 4.3  Borrow Suitability and Availability Support**

The Consultant will support borrow evaluations through development of volume needs, zoning, balance, and cost sensitivity. Activities to include:

- Prepare TM for Factor of Safety fill requirements.
- Repeated evaluations of mass balance scenarios as a function of setback levee zoning to support borrow negotiations.
- Development of levee fill zoning scenarios and vetting with USACE, including development of revised material type specifications so that borrow requirements could be further refined as a result of ongoing negotiations with suppliers.
- Redefinition of available borrow material based on new fill specifications.
- Borrow polygon exhibits showing the aerial extents and depths of materials having the revised fill specification characteristics.
- Determine the proximity of APN 046 100 003 to assess the need for additional sample pits in the Liberty Borrow site and identify coverage with previous test pits.
- Prepare TM on addressing how much of the setback levee can be constructed utilizing as much offset area and existing levee degrade as possible, combined with some amount of off-site borrow material.
- Provide Oak Knoll Bend Borrow Site Seepage analyses.

Assumption: Fill specifications will not change from the values established during the 7/10/14 geotechnical design concurrence meeting with the USACE. This will be priced on work to date, plus 5 additional iterations.

**Task 5.  Interim Village Parkway Revisions and Refinement**

**Subtask 5.1  Prepare Village Parkway Alignment Revisions**

The Consultant will evaluate and design a realigned Interim Village Parkway to parallel an existing parcel boundary south of Linden Rd, and minimize impacts to properties while maintaining the footprint within the anticipated development dedicated right of way. This
work is specific to the north side of Linden Rd as a result of developer requests, and at Access Road #1.

Subtask 5.2  Yacht Club Access Evaluations

The Consultant will review site plan and alignment information provided by WSAFCA to confirm that the proposed community park access to the Yacht Club will not encroach on the current project features. This task will include:

- Development of profiles, figures, and drainage evaluations.
- Revision to Interim Village Parkway roadway and drainage plans to reflect new intersection for Yacht Club access.

Subtask 5.3  Phase I and II Investigations

The Consultant will review and confirm Phase I Environmental Site Assessment (ESA) (provided by WSAFCA) findings for those parcels along the Interim Village Parkway alignment. Based on finding from Phase I investigations, the Consultant will review and confirm Phase II investigations (provided by WSAFCA) where necessary. This effort is necessary to ensure standard of care and identification of Phase II requirements.

Task 6.  Funding Agreement Support

The Consultant will support WSAFCA in efforts to maximize State and federal cost share and development of a Construction Funding Agreement. These supporting activities will include:

- Develop Cutoff Wall cost evaluations to support funding application and agreement, including review of rapid draw down evaluation from 65% DDR. This effort includes modifying the CMA 3 cost opinion for consistency with the CMA 4 cost opinion.
- Development of South River Road evaluations to support comparison with proposed Interim Village Parkway alignment.
- Assist WSAFCA with Village Parkway Alignment Justification white paper.
- Assist WSAFCA developing figure(s) for Pumping Plant #5 justification.
- Advanced efforts for development of 90% and 100% design element cost opinions.
- Support WSAFCA in negotiating a funding agreement by providing as-needed evaluations of costs, alternative design elements and features, and compensability.
- Continued support to WSAFCA with program financial decisions through preparation of trade-off analyses.
- Continued support to WSAFCA for DWR funding justifications on an as-needed basis, as questions of compensability arise.

Assumption: Efforts to support WSAFCA funding agreements, justifications, and financial decisions are estimated on an as-needed basis, as future requirements are unknown (but likely). The Consultant has estimated 78 hours of technical support for these tasks.
Task 7. Household Hazardous Materials Inventory, Specifications and Cost Opinion

The Consultant will prepare an inventory of household hazardous materials, and develop appropriate documents for bid package. Activities to include:

- Identify and review household data, including age and type of structure.
- Estimate quantities of hazardous materials to be removed and disposed by a contractor.
- Modify demolition specifications to account for types of material to be disposed.

Task 8. Environmental Documentation and Permitting

Subtask 8.1 Administrative Draft EIS/EIR Reflecting the Interim Condition

Consultant will prepare additional EIS/EIR review iterations. Prior to release of the Draft EIS/EIR, the Consultant will modify the proposed project and its alternatives to add the interim condition feature. Effort will consist of a major restructuring of the then-existing administrative draft EIS/EIR and two additional administrative draft iterations. Additional efforts will be performed to support increased coordination with USACE, reconsideration and redrafting of environmental impacts, and modifications to graphics.

Subtask 8.2 Administrative Final EIS/EIR Revision

Prior to release of the Final EIR, the Consultant will prepare an additional project description iteration, the RAPA (Revised Application Preferred Alternative). The RAPA PD will be incorporated into an additional Administrative Final EIS/EIR iteration and its environmental effects analyzed as part of Volume II, Response to Comments. The Consultant will also revise the Mitigation and Monitoring Plan, and appended it to the Administrative Final EIS/EIR as part of this effort.

This task is also necessitated by ICF’s Risk Assessment effort, which identified a series of items for increased scrutiny and team resolution. ICF will lead the effort to identify public comments for resolution, gather additional data, perform analysis, and draft proposed revisions to the EIS/EIR.

Subtask 8.3 Administrative Draft Biological Assessments (BA) to Reflect the 90% Lite Data Set (RAPA)

Following completion of the RAPA, The Consultant will revise the BAs to reflect the effects of RAPA implementation and resubmit the BAs to USACE to reinitiate ESA consultation.

Subtask 8.4 Revised Permit Applications

Revision of the RAPA, as well as other subsequent design changes, will necessitate revision and resubmission of permit applications under the Clean Water Act and California Fish & Game Code.
Subtask 8.5  Environmental Clearances for Interim Village Parkway

This future task includes CWA Section 404 and 401, F&G Code Section 1602, and ESA/CESA compliance in support of Village Parkway construction.

Subtask 8.6  Environmental Clearances for Revised Configuration

This task includes permitting and CEQA/NEPA compliance strategies and execution for incorporation of new and changed project features, including the TOC site, revised inlet/outlet quantity/location, additional borrow site locations, and changed borrow site conditions. The method of compliance for each item will vary, but it is assumed to include modifying the existing permit packages to include new project elements and prepare a CEQA Technical Addendum for the same.

Subtask 8.7  Cultural Resources Phased Inventory and Finding of Effects

The Consultant will coordinate with the USACE to identify an appropriate Area of Potential Effects (APE), within which the Project that could result in direct or indirect effects on cultural resources. The activities to be completed under this subtask include:

- Prepare APE maps
- Field Inventory
- Subsurface Survey
- Additional Background and Property Specific Research
- Native American and Historical Society Consultation
- DPR 523 Forms
- Preparation of a Cultural Resources Inventory Report
- Preparation of a Finding of Effect (FOE)
- Preparation of a Resources-Specific Historic Properties Treatment Plan (HPTP).

Assumptions: This subtask is based on the RAPA schedule as of August 6, 2014. While this scope will provide a basis for the cultural resources phased inventory and finding of effects, the scope may need to be revised during the construction phase. Revisions may be incorporated into construction phase activities.

Subtask 8.8  Utility Bill Inserts

The Consultant will prepare 15,500 utility bill inserts for public notice of the Southport project.
Task 9. Vegetation Variance

Activities associated with the Vegetation Variance Request in TO 4, Amendment #3 have identified the potential to revise project elements that will result in overall cost savings to WSAFCA. Activities that led to these finding were largely developed during meetings and coordination of the vegetation variance. Completion of the vegetation variance request is an activity that will now be completed by the USACE. As such, the remaining uncompleted activities of this task are removed from the Amendment #3, and the remaining funds are de-obligated and will be re-allocated to Amendment #4 task items.

Task 10. Surveys

Subtask 10.1 Topographic Survey Independent Technical Review

The Consultant will provide outside independent technical review of field surveys to verify the topographic survey.

Subtask 10.2 Pot Hole Gas Line at Linden

The Consultant will complete hydro excavations and survey the top of the PG&E gas line at Linden Road.

Task 11. TOC Remediation

The Consultant will incorporate work done by others into the Project plans and specifications. This optional subtask will include:

- Review of Phase I ESA
- Review of Phase II Site Investigation Report
- Review Soils Remediation and Groundwater Management Plan
- Internal Meetings and Project Communication

Task 12. Borrow Site Survey

Subtask 12.1 Topographic Survey - Sarmento

The Consultant will provide topographic surveys for the Sarmento borrow site. The survey will include topographic mapping and cross sections of adjacent levees, sloughs, and ditches. Surficial appurtenances and structures will be included in the survey.

Subtask 12.2 Topographic Survey - Watermark

The Consultant will provide topographic surveys for the Watermark borrow site. The survey will include topographic mapping and cross sections of adjacent levees, sloughs, and ditches. Surficial appurtenances and structures will be included in the survey.
Fee and Schedule
HDR proposes to complete the study and design efforts described herein on a time and materials basis for an amount not to exceed $2,384,645.58 without written authorization by WSAFCA. The work will be completed in conjunction with the 90% and 100% overall Southport EIP design submittals as described in the TO 4 scope of work and schedule. The period of service for TO 4 is amended to December 31, 2015. A detailed breakdown of the proposed amendment fee is contained in Attachment A. If the proposed contract amendment is acceptable to WSAFCA, please sign and return the two enclosed copies of the document. If there is a need to discuss any aspect of the proposal please contact Sergio Jimenez at 916-471-5803. HDR values its role supporting WSAFCA’s continuing efforts to improve its flood protection system and looks forward to doing so in the future.

Best Regards,

Holly Kennedy, P.E. Sergio Jimenez, P.E.
Associate Vice President Project Manager

70723/SJ/cs
HDR Fee Proposal
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- Total Hours: 6

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### Task: Review MBK white paper
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### Task: Develop terrain model for heterogeneity and cellular berm
- No: 8
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- Total: $7,296.00
- Total Labor: $3,648.00
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### Task: Analyze and prepare condition cost impact analysis
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- Total Labor: $216.00
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### Task: Develop cost estimate for Interim Condition Alternative 2
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- Total Labor: $216.00
- Total Hours: 20
### WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

#### LEVEE IMPROVEMENT PROGRAM

#### FEE ESTIMATE SACRAMENTO RIVER SOUTHPORT DESIGN PROJECT

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*SACRAMENTO RIVER SOUTHPORT DESIGN PROJECT - Task Order No. 4 Amendment 4

1. Revise design elements to single I/O configuration in each offset area.
2. Modify topographic heterogeneity in offset.
3. I/O dimensions will be reevaluated.
4. Revise Terrain model.
5. Re-evaluate available offset area and existing levee degradation materials.
6. Tabulate summary of revised earthwork mass balance from revisions.
7. Support internal and public meetings.
8. Respond to comments on public draft (support from engineering team).
9. Support mitigation monitoring program development (engineering team).
10. Revise erosion control design for single inlet configuration.
11. Prepare Technical Memoranda documenting analyses and findings.
12. Complete geometric analysis to support final design, including TM.
14. Prepare offset telemetry line changes (changed TM).
15. Geometric input to Final Design/Reporting.

---

*For supporting materials and details, please refer to the original document.*
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**Subtask 8.1 - Admin Draft EIS/EIR Reflecting the Interim Condition**

**Subtask 8.2 - Administrative Final EIS/EIR Revision**

**Subtask 8.3 - Admin Draft BAs to Reflect the 90% Lite Date Set (RAPA)**

**Task 8.4 - Revised Permit Application**

**Subtask 8.4.1 - RAPA Revision**

**Subtask 8.5 - Environmental Clearances for IV Phrase**

**Subtask 8.5.1 - IVP Environmental Clearances**

**Subtask 8.6 - Environmental Clearances for Revised Configuration**

**Subtask 8.6.1 - Minor Permit Revisions**

**Subtask 8.7 - Cultural Resources Phased Inventory and FO**

**Subtask 8.7.1 - Preparation of 15,500 utility bill inserts**

**Subtask 8.8 - Utility Bill Inserts - Outreach**

**Subtask 8.8.1 - Preparation of 15,500 utility bill inserts**

**Task 9 - Vegetation Variance**

**Subtask 9.1 - Variance Support (3 revisions of plans)**

**Subtask 9.1.1 - Meetings and Coordination**

**Task 10 - Surveys**

**Subtask 10.1 - Topographic Survey Independent Review**

**Subtask 10.2 - Pot Hole Gas Line at Linde**

**Task 11 - TOC Remediation**

**Subtask 11.1 - Review of Phase I ESA**

**Subtask 11.1.1 - Review of Phase II Site Investigation Report**

**Subtask 11.1.2 - Review Soils Remediation and GWMP**

**Subtask 11.2 - Incorporate into Plans and Specifications**

**Subtask 11.3 - Design Coordination**

**Task 12 - Borrow Site Survey**

**Subtask 12.1 - Boundary and Topo Survey - Sacramento**

**Subtask 12.2 - Boundary and Topo Survey - Watermark**

**Task 12.3 - Surveys**

**Subtask 12.3.1 - HDR Review and QC**

**Task 13 - Surveys**

**Subtask 13.1 - HDR Review and QC**

**Expenses 1**

1. Expenses are calculated as 5% of Total Labor
2. Sub-Consultants fees include 5% mark-up.
July 30, 2014

Mr. Richard Haynes  
**HDR, INC.**  
1325 J Street, 16th Floor  
Sacramento CA, 95814

RE: Psomas QA/QC services for topographic mapping associated with WSAFCA Southport Levee Project.

Dear Mr. Haynes:

As requested, Psomas will perform the following additional QA/QC services in support of the WSAFCA Southport Levee Project:

Psomas agrees to perform the following scope of services:

**Field Verification Survey of Morrow Topographic Survey**

- Psomas will perform field surveys along the Southport Levee Project to assess the Morrow topographic mapping product. Psomas field surveys will utilize the Morrow point file to establish locations for comparison measurements at regular intervals along the project levee. The Psomas survey will utilize digital levels to provide an accurate and consistent measurement for elevation comparison with the Morrow RTN survey data.
- Psomas will provide a table depicting the differences between the Morrow measurements and the Psomas measurements.

Psomas’ Proposed Fee: $6,500.00

Please contact me if you have any questions or comments regarding our proposed scope and fee.

Sincerely,

**PSOMAS**

Scott Bryant, PLS  
Survey Project Manager
BCI Proposal
PROPOSAL FOR ADDITIONAL GEOTECHNICAL ENGINEERING SERVICES
Southport Early Implementation Project (EIP)
BCI File No. 1978.6
July 31, 2014

Blackburn Consulting (BCI) prepared this proposal to provide additional geotechnical engineering services in support of 90% design for the Southport EIP. The Design team has requested BCI to perform additional geotechnical analysis in preparation of the 90% design that was not anticipated during the preparation of the proposed fee to perform 90% design. In addition, the design team is requesting future additional geotechnical analyses not originally anticipated.

TASK 1  SARMENTO BORROW SITE EVALUATION

The design team previously authorized BCI to conduct a borrow site evaluation of the Sarmento Borrow site using funds from other previously authorized tasks, including further site evaluations of the Yarbrough borrow site. These funds may be required for 90% design, and therefore are requested as an additional item.

In addition, the design team has requested BCI to provide a scope and fee to perform seepage and slope stability analysis of the Deep Water Ship Channel levee adjacent to the Sarmento Borrow site, if proposed borrow construction activities are planned within 300 to 500 feet of the levee toe. To perform this evaluation, BCI proposes to drill two borings, 60 to 80 feet in depth, perform laboratory tests on collected soil samples for classification, strength and seepage input parameters, and construct up to two cross-sections for seepage and slope stability analyses, evaluate our findings and prepare conclusions and recommendations.

TASK 2  ADDITIONAL PROJECT MANAGEMENT

From completion of the 65% design document to date, the design team has requested BCI provide geotechnical engineering services (see Task 3) that require project management. The original fee for project management during 90% design did not anticipate these additional costs.

TASK 3  ADDITIONAL 90% DESIGN ENGINEERING

From completion of the 65% design document to date, the design team has requested BCI provide geotechnical engineering services related to 90% design including preparation of a deep cutoff wall memo (including review, edits re-writes and design-team discussions), and development and preliminary analysis of a thickened fat clay core levee cross-section (including meetings with and HDR and USACE and response to HDR comments). The original fee for the 90% design DDR did not anticipate these additional costs.

TASK 4  UPDATE AND PREPARE FINAL PLAN AND PROFILE

BCI previously received a 90% design alignment, which the design team expected to be the final 90% design alignment. The design team directed BCI to begin updating the geotechnical plan and profiles accordingly. However, since this time, BCI has been informed by the design team to stop work on this task, as the alignment has been modified. The original fee did not anticipate this additional work.
TASK 5   OAK KNOLL BORROW EVALUATION OF EXISTING LEVEE

The design team has requested to BCI provide a geotechnical analysis of potential landside borrow activity impacts to the existing levee at Oak Knoll Bend due to potential borrow in the offset area between the existing levee and the new 90% alignment during the off season.

To perform this work, BCI will prepare a cross-section of the existing levee and run seepage and stability analyses on this cross-section under the current conditions. BCI will then run seepage and stability analyses on the cross-section with the proposed offset borrow excavation and evaluate the impact to the existing levee by comparing the seepage and stability results in the current condition to the results with the offset borrow. BCI will evaluate the findings and prepare conclusions and recommendations to the design team.

TASK 6   ADDITIONAL MEETINGS

From completion of the 65% design document to the present day, the design team has requested BCI attend design meetings to discuss geotechnical engineering services. The original fee for project design meetings during 90% design did not anticipate these additional costs.

TASK 7   PRELIMINARY 90% DESIGN SIP RDD AND STEADY STATE SLOPE STABILITY, AND SEGMENT B1 SEEPAGE BERM ADJUSTMENT ANALYSIS

Modifications to the Strengthen-In-Place (SIP) and Adjacent levee improvement details and terrain models within Segments A, B1 and G require preliminary slope stability and seepage berm adjustment evaluation not originally anticipated during the preparation of the scope and fee for geotechnical services to support 90% design. Levee improvement measures for all three segments currently consist of SIP improvements of the existing levee without an offset. WSAFCA and HDR have therefore requested a proposal from BCI to perform the following additional geotechnical services to support 90% design:

1. Identify up to two sections for the SIP evaluation that are considered to represent critical conditions with respect to meeting rapid drawdown (RDD) and steady-state stability conditions in Segments A, B1, and G.
2. Assuming an SIP upgrade in Segment B1 appears feasible by virtue of the critical section(s) in No.1 meeting criteria, evaluate whether the toe of the seepage berm in Segment B1 can be shifted to the east while still meeting underseepage criteria.

BCI proposes the following tasks to complete the additional geotechnical services.

Task 7a   Identify Critical Slope Stability Cross-sections
BCI will perform the following:

- Review the most current SIP details and terrain model within Segments A, B1 and G. To perform this evaluation, HDR will provide BCI with the most current SIP details, terrain models and cross-sections for Segments A, B1 and G. The details, terrain models
and cross-sections will have surface topography, bathymetry, the existing levee, and the proposed SIP levee improvement cross-section detail. In addition, the design team will either provide BCI with updated water surface elevations (WSE), or direct BCI to use the 65% design WSEs.

- Determine the most critical one or two cross-sections based on slope geometry, surface topography and subsurface conditions taking into account the variability of potential SIP levee zoning.
- Determine appropriate strength parameters for stability analyses.
- Meet with HDR ITR to review, adjust and confirm critical cross-sections, proposed zoned levee model and strength parameters, and develop a slope stability procedure.

**Task 7b Stability Analysis**

BCI will perform RDD and steady-state stability analyses on the critical cross-sections from Task 1 using SLOPE/W. The analyses will include a sensitivity analysis as appropriate. BCI will then meet with HDR ITR to present and discuss our findings and conclusions for each analysis.

**Task 7c Segment B1 Seepage Berm Evaluation**

Provided the slope stability analyses performed in Task 2 show that an SIP levee improvement measure will pass slope stability criteria for Segment B1, BCI will perform a seepage analysis using SEEP/W for the cross-section within Segment B1. BCI will determine the minimum seepage berm width required to meet criteria and present our findings to the design team. BCI will require the 90% design WSEs to perform this analysis.

**Task 7d Technical Evaluation Document**

Upon completion of the analyses and optional analyses as appropriate (discussed below), BCI will prepare a Technical Evaluation Document. This document will include the following:

- An executive summary of the evaluation, findings and conclusions, and signed internal quality control certification form from BCI.
- Model cross-sections including cross-sections depicting the SIP zoned levee and the analyses results with failure planes, factors of safety, water surface elevations and material parameters.

**Task 7e Prepare for and Attend Meeting with USACE and Design team**

BCI will meet with HDR to prepare for and will attend a meeting with USACE and the design team to present our findings and conclusions of the slope stability analyses.

**Task 7f Optional - Re-Assessment of Evaluation**

If one or more analyses under Task 7b do not meet criteria, BCI will work with HDR to re-assess the evaluation and determine steps to move forward for 90% design. This evaluation could include further evaluation of the selected critical cross-sections, and potential break-down of the Segments identifying areas where and SIP is appropriate and where an adjacent levee is still recommended.
Southport EIP - 90% Design
Task Order - July 2014 Amendment Items
Geotechnical Cost Proposal

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Task 1b: Fieldwork Preparation (Meeting, Locate Explorations, County Permits, USA)

| Sr. PM | 6. | $185.00 hour | 1. | $1,110.00 |
| Sr. Engineer | 12. | $140.00 hour | 1. | $1,680.00 |
| County Permit | 1. | $513.00 permit | 1.15 | $589.95 |
| Project Assistant | 2. | $110.00 hour | 1. | $220.00 |
| Mileage | 12. | $0.85 mile | 1. | $10.20 |

$ 3,610.15

Task 1c: Explorations

| Sr. PM | 2. | $185.00 hour | 1. | $370.00 |
| Project Engineer | 20. | $135.00 hour | 1. | $2,700.00 |
| Borings | 2. | $5,000.00 hole | 1. | $10,000.00 |
| Mileage | 24. | $0.85 mile | 1. | $20.00 |

$ 13,090.40

Task 1d: Laboratory Testing

| Sr. PM | 2. | $185.00 hour | 1. | $370.00 |
| Lab Manager | 5. | $135.00 hour | 1. | $675.00 |
| #200 Sieve Wash | 10. | $110.00 test | 1. | $1,100.00 |
| Plasticity Index | 6. | $195.00 test | 1. | $1,170.00 |
| Moisture/Density | 10. | $75.00 test | 1. | $750.00 |
| Hydraulic Conductivity | 4. | $440.00 test | 1. | $1,760.00 |

$ 5,825.00

Task 1e: Construct Cross-Section

| Sr. PM | 2. | $185.00 hour | 1. | $370.00 |
| Sr. Engineer | 16. | $140.00 hour | 1. | $2,240.00 |
| Staff Engineer | 8. | $135.00 hour | 1. | $1,080.00 |
| Drafting | 8. | $110.00 hour | 1. | $880.00 |

$ 4,570.00

Task 1f: Seepage and Stability Analysis (HTOL and DWSE) (Includes HDR Review and Revisions)

| Sr. PM | 4. | $185.00 hour | 1. | $740.00 |
| Sr. Engineer | 20. | $140.00 hour | 1. | $2,800.00 |
| Staff Engineer | 8. | $135.00 hour | 1. | $1,080.00 |

$ 4,620.00

Task 1g: Evaluate Findings and Prepare Conclusions and Recommendations

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| Sr. Engineer | 16. | $140.00 hour | 1. | $2,240.00 |
| Drafting | 6. | $110.00 hour | 1. | $660.00 |

$ 3,640.00

Subtotal Task 1: $ 77,355.55
Southport EIP - 90% Design  
Task Order - July 2014 Amendment Items  
Geotechnical Cost Proposal

July 31, 2014  
BCI File No. 1978.6

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## Southport EIP - 90% Design
### Task Order - July 2014 Amendment Items
#### Geotechnical Cost Proposal

**July 31, 2014**

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cbec Proposal
1. ECOLOGICAL MITIGATION PLANNING

(Note: The additional items under Task 1 will be billed and tracked separately such that reimbursement to WSAFCA can be easily tracked).

As a result of additional mitigation planning requested by WSAFCA, the following tasks have been identified as additional out-of-scope items.

Proposed project designs for the levee offset area have currently been developed to the 65% design level. However, these designs currently provide for the minimum of ecological enhancement. The purpose of this task is to take these preliminary designs and develop them to allow for substantial ecological enhancements that will support an extensive, successful mitigation bank. This will focus on two primary areas:

1. Water edge margin habitat, or Shaded Riverine Aquatic (SRA) habitat. The primary areas for SRA will be focused along the existing riverbank of the Sacramento River. The existing levee is currently generally constructed along the top of the riverbank. With implementation of the project, the new levee will be set back from the riverbank for distances varying from 300 feet to over 1,000 feet, and the existing levee will be degraded along the riverbank. One of many benefits of removing the existing levee from the riverbank is that this will then allow for substantial lengths of riverbank to be enhanced with riparian vegetation. The current riverbank already has extensive reaches of riparian vegetation, but also significant reaches without riparian vegetation. In addition, current project designs call for areas to be stabilized with biotechnical treatments to minimize bank erosion in critical areas. Existing riparian vegetation will be combined with additional planting and erosion treatment areas to provide one contiguous riparian corridor along the riverbank that will provide extremely valuable and extensive SRA habitat.

2. Floodplain habitat. The offset area will expose up to 125 acres of floodplain habitat. Current designs call for reduction in the floodplain elevation by 10 to 13 feet, resulting in floodplain that will be frequently flooded for substantial durations and areas during winter and spring months every year. Within this offset area, a system of swales will be designed that will form the primary riparian and aquatic habitat corridors that will also
provide for floodplain drainage of the offset area. Additional edge margin habitat will be created along these swales. In addition, topographic heterogeneity will be incorporated into the project design grading plans that will allow for a mosaic of seasonal wetland and riparian upland habitats. Seasonal wetland areas will be enhanced with wetland vegetation, while riparian upland habitats will include a variety of willow-scrub and oak savannah type enhancements. Finally, other enhancements may be incorporated, such as the inclusion of large woody material (root wads/engineered log jams) to provide for additional flow diversity and habitat refugia valuable for aquatic habitats in the offset area.

The elements that will be involved in the revision and update of the current concept designs is described in the following tasks.

**Physical Concept Design**

Using data and models already developed under Task Orders 1 through 4, the preliminary concept design will be enhanced to incorporate substantial topographic heterogeneity and other features that will support a diverse mosaic of ecological habitats. Enhancements for the edge margin habitat will be analyzed using the hydrodynamic and sediment transport models to ascertain design parameters such as water surface elevation, velocity and shear stress over a range of flows to inform planting pallets such that appropriate vegetation is planted at suitable elevations. Velocity and shear stress will inform the appropriate vegetation selection such that designs are resistant to shearing forces and maximize the longevity of the designs to erosive forces.

Similarly, modeling tools will be utilized to predict floodplain inundation area, depth, frequency, timing and duration, for a variety of floodplain offset elevations, and in combination with habitat evaluation criteria, help inform the selection of vegetation, whether riparian, wetland or upland, for proposed planting pallets.

**1.6 – Input to 100% Designs**

cbec will support HDR in the development of civil designs for the offset. cbec will provide data relative to the physical design to inform plans and specifications.

The level of effort for this task will be commensurate with the remaining budget hours allocated in the accompanying budget estimate to this scope of work.

**1.7 – Mitigation Enhancement Design for 90%**

cbec will support HDR and ICF in the development of mitigation enhancement for the 90% design level primarily through the analysis described previously, and through the development of design documentation, including plans, specifications and cost estimates, as they relate to the physical design components of the mitigation enhancement design. We have assumed that ICF will provide all biological input into this design documentation including planting and irrigation plans and associated specifications and cost estimates.
The level of effort for this task will be commensurate with the budget hours allocated in the accompanying budget estimate to this scope of work.

1.8 – Mitigation Enhancement Design for 100% - Not yet authorized

This task has not been authorized and we have not allocated budget to it.

Based on comments and edits generated through review by regulatory agencies, HDR and WSAFCA, cbec will respond to collated comments to produce 100% design level documentation.

The level of effort for this task will be commensurate with the budget hours allocated in the accompanying budget estimate to this scope of work.

2. EIS/EIR SUPPORT

Our understanding is that the EIS/R has been submitted for the 65% design condition. As such, we foresee future cbec efforts to include assistance to the environmental team in responding to public comments. If a mitigation and monitoring plan is required, we have allowed budget to support that effort. In the case that the project follows the single-inlet option, there may be an amendment to the EIS/R, for which we have allotted support.

Task 2.2 – Support for internal and public meetings

We assume there will be no more internal, or public meetings related to the EIS/EIR and have not allocated budget to this task.

Task 2.3 – Respond to comments on public draft (multiple inlet) – Base

This task will include providing design information such as clarifications, details and data, and coordinating with the design team to make design revisions to accommodate comments on the geomorph chapter. We will respond to collated comments, providing responses in electronic format.

Task 2.4 – Support for mitigation monitoring program development (multiple inlet) – Base

cbec will provide support to the design team in the event that a mitigation monitoring program is required as a result of the EIS/EIR process. cbec will provide informational support to clarify details of erosion control and biotechnical stabilization designs.

The level of effort for this task will be commensurate with the budget hours allocated in the accompanying budget estimate to this scope of work.

Task 2.5 – Support for internal and public meetings (single inlet) – optional task 1

In the event that the project pursues a single inlet design option, cbec will attend up to one internal and one public meeting.

The level of effort for this task will be commensurate with the budget hours allocated in the accompanying budget estimate to this scope of work.

Task 2.6 – Respond to comments on public draft (single inlet) – optional task 1
This task will include providing design information such as clarifications, details and data, and coordinating with the design team to make design revisions to accommodate comments on the geomorph chapter. We will respond to collated comments, providing responses in electronic format.

**Task 2.7 – Support for mitigation monitoring program development (single inlet) – optional task 1**

cbec will provide support to the design team in the event that a mitigation monitoring program is required as a result of the EIS/EIR process. cbec will provide informational support to clarify details of erosion control and biotechnical stabilization designs.

The level of effort for this task will be commensurate with the budget hours allocated in the accompanying budget estimate to this scope of work.

**3. PERMITTING SUPPORT**

cbec has been requested by WSAFCA to assist HDR and ICF with the development of the Construction Stormwater Permit and associated SWPPP through the following out-of-scope items.

**3.1 Construction Stormwater Permit Support**

**This task has not been authorized and we have not allocated budget to it.**

Cbec will assist HDR with the preparation of a draft Stormwater Pollution Prevention Plan (SWPPP) for the Project. The Project area will need site containment of sediment runoff. Temporary and very temporary roads will be constructed and used for on- and off-site soil transport. The construction is planned for 3 phases, generally between May and October.

We have assumed that ICF/HDR will lead the development of the SWPPP. We will support this effort by our Qualified SWPPP Developer/ Qualified SWPPP Practitioner (QSD/QSP), and will be in accordance with the Construction General Permit (CGP) (CAS000002, Order No. 2009-0009-DWQ). The SWPPP will include Best Management Practices (BMPs) for stormwater runon and runoff controls, erosion control, sediment, and water quality (WQ) control to meet narrative WQ requirements. BMPs will be developed using Best Available Technology. Economically Achievable (BAT) and the Best Conventional Pollutant Control Technology (BCT) standards.

Because the Project Site may be Risk Level 2 or 3, the Project site will need to be monitored for pH and turbidity. Numeric Action Levels (NALs) are 6.5 to 8.5 for pH and <250 NTU for turbidity. Exceedance of these levels will require implementation of supplemental BMPs and reporting, but will not result in violations or fines for exceedances at this point. Rain Event Action Plans (REAPs) are required at Risk Level 2/3 and will need to be developed when the chance of rain exceeds 50%. Scope to develop REAPs will be provided under a later Task Order for construction monitoring.

The following types of erosion control methods will be deployed to prevent discharge from the project site above Numeric Action Levels (NALs) of 6.5 to 8.5 for pH, and 250 NTU for turbidity:
Good housekeeping: Covering inactive, loose stockpiles (as described above); access/entrance BMP controls including gravel traps or equivalent to reduce offsite tracking of sediment and plant/landscape materials

- Waste Management: Secure stockpiles (as described above) from wind and rain when inactive
- Site Containment: Use of silt fences, straw wattles or equivalent to prevent/reduce offsite discharge
- Landscape Management: Stack erodible landscape material on pallets when not in use; discontinue use of erodible landscape material within 2 days of forecasted rain event (50% chance of rain); apply landscape at appropriate application rates
- Run On Diversion: Diversion of stormwater flowing onsite from upstream sources, if needed

Specifically, cbec’s input into the SWPPP will be with regard to elements associated with the erosion control measures along the riverbank of the Sacramento River and riparian enhancement associated with development of a mitigation bank at the project site. A draft version of the SWPPP, in electronic format, will be provided for review and comment.

cbec will assist HDR/ICF through incorporation of client comments and State Board/Regional Board comments into a final SWPPP. The SWPPP, as it relates to cbec’s areas of responsibility, will be provided in electronic format and hard copy format. It should be noted that the SWPPP will be a living document and will change based on occurrences in the field. Only the QSD is allowed to make changes to the SWPPP.

The level of effort for this task will be commensurate with the budget hours allocated in the accompanying budget estimate to this scope of work.

3.2 Establish Baseline Suspended Sediment Regime in River

This task has not been authorized and we have not allocated budget to it.

Related to preparation of the SWPPP implementation (Site Management), including monitoring, cbec will undertake suspended sediment measurement transects in the Sacramento River in order to establish the baseline (background or ambient) conditions. Turbidity measurements must be taken in the receiving waters weekly during construction and more frequently during rain events, according to regulatory requirements. However, the background (or ambient) conditions should be established such that potential impacts can be identified. For this purpose we recommend the following approach:

- Two monitoring transects across the river will be established, one just upstream and a second just downstream of the project site.
- We will utilize our boat and crane mounted suspended sediment monitoring equipment to measure multiple suspended sediment samples at a range of depths across each transect.
- We will capture 6 samples per transect per measurement event.
- We will capture up to 3 different monitoring events. Monitoring events will be determined through coordination with the project team.
5. GEOMORPHIC INPUT INTO FINAL DESIGN

5.5 – Input to 90% Designs (multiple inlet) – Base

Based on stakeholder and agency review of the 65% designs, cbec will provide design support to HDR in order to provide 90% level design and specifications for the multiple inlet configuration. cbec will provide items such as modifications to design details, specifications and cost estimates, and provide review of design documents as requested by HDR.

5.6 – Input to 100% Designs (multiple inlet) – Base

Based on stakeholder and agency review of the 90% designs, cbec will provide design support to HDR in order to provide the final, 100% level design and specifications for the multiple inlet configuration. cbec will provide items such as modifications to design details, specifications and cost estimates, and provide review of design documents as requested by HDR.

5.8 - Erosion Control Design Modifications for 90% Designs (multiple inlet) – Base

As part of the on-going efforts to prepare erosion control designs primarily for the remnant Sacramento River bank, but also for other offset features, such as inlets/outlets and floodplain swales. cbec will provide design services to the HDR team for the production of biotechnical bank stabilization methodologies or more traditional rip-rap sizing methodologies, if required based on regulatory specifications. Generally, cbec will provide elements of the design drawings, such as design details, typical cross sections, long profiles, etc., in CAD format, as well as cost opinions and specifications. These will be included into the project design documentation by HDR. All cbec submittals will be electronically, via e-mail or ftp.

Erosion repair and inlet stabilization measures were refined to a 90% level in support of BA efforts prior to May, 2014. As such, efforts to refine erosion repair designs are anticipated to be minimal for the 90% design.

5.9 – Erosion Control Design Modifications for 100% Designs (multiple inlet) – Base

Upon receipt of review comments by WSAFCA, DWR and other regulatory agencies, cbec will collaborate closely with HDR to produce the final design documentation, including plans, specifications and cost opinions. All cbec submittals will be electronically, via e-mail or ftp.

The level of effort for this task will be commensurate with the budget hours allocated in the accompanying budget estimate to this scope of work.

5.10 - Input to 90% Designs (single inlet) – optional task 1
Based on stakeholder and agency review of the 65% designs, cbec will provide design support to HDR in order to provide 90% level design and specifications for the single inlet configuration. cbec will provide items such as modifications to design details, specifications and cost estimates, and provide review of design documents as requested by HDR.

5.11 – Input to 100% Designs (single inlet) – optional task 1

Based on stakeholder and agency review of the 90% designs, cbec will provide design support to HDR in order to provide the final, 100% level design and specifications for the single inlet configuration. cbec will provide items such as modifications to design details, specifications and cost estimates, and provide review of design documents as requested by HDR.

5.12 – Erosion Control Design Modifications for 90% Designs (single inlet) – optional task 1

As part of the on-going efforts to prepare erosion control designs primarily for the remnant Sacramento River bank, but also for other offset features, such as inlets and floodplain swales, cbec will provide design services to the HDR team for the production of biotechnical bank stabilization methodologies or more traditional rip-rap sizing methodologies, if required based on regulatory specifications. Generally, cbec will provide elements of the design drawings, such as design details, typical cross sections, long profiles, etc., in CAD format, cost opinions, and specifications. These will be included into the project design documentation by HDR. All cbec submittals will be electronically, via e-mail or ftp.

The level of effort for this task will be commensurate with the budget hours allocated in the accompanying budget estimate to this scope of work.

5.13 – Erosion Control Design Modifications for 100% Designs (single inlet) – optional task 1

Upon receipt of review comments by WSAFCA, DWR and other regulatory agencies, cbec will collaborate closely with HDR to produce the final design documentation, including plans, specifications and cost opinions. All cbec submittals will be electronically, via e-mail or ftp.

5.14 - Offset residency time analysis (multiple/single inlet) – optional task 3

Refinements to the 65% offset design configuration include the addition of the “cellular berm” feature, which, similar to the proposed “single inlet” design concept, alters the hydraulic residency within the offset areas. Changes to the hydraulic residency time will have potential to alter the ecological function of the offset areas from initial design concepts (flow-through configuration). Given that these design changes differ from what has been proposed in submitted environmental documentation, it may become necessary to further quantify hydraulic residency as it relates to ecological function for the selected offset design concept (multiple or single inlet) to maintain regulatory agency concurrence.

At the request of a regulatory agency, cbec through coordination with HDR, ICF and WSAFCA, proposes to analyze hydraulic residence time associated with the preferred design concept (single or multiple inlet). This task will include the development of a SMS PMT (particle tracking model) that will rely upon output from hydraulic models developed under previous efforts.
Using this tool, cbec will quantify hydraulic residency for a series ecologically significant flow events and will describe the potential significance for ecological processes within the offset areas.

9. OFFSET EVALUATIONS, REVISIONS, AND REFINEMENT (OUT OF SCOPE TASKS):

As a result of tasks completed in fulfillment of the original Task Order 4, the following tasks have been identified as additional out-of-scope items. Budget allocated to these tasks along with remaining funds will be utilized to continue efforts for the multiple inlet analysis associated with tasks 2, 5, 7 and 8.

9.1 – Inlet Vegetation Survey and TM

The construction of inlets for the proposed offset floodplain areas will require the remnant levee and floodplain to be degraded to an elevation of 10 ft (NAVD 88) at the five proposed inlet locations. The current inlet design prescribes the retention of existing revetment in good condition below elevation 10 ft, and placement of vegetated coir from elevation 7 to 10 ft in areas that lack revetment, or where the revetment condition is found to be poor. Existing riverbank vegetation in areas of poor or no revetment will be removed and replaced with a vegetated coir fabric treatment. In an effort to refine this design detail, cbec was requested by HDR to consider the treatment of existing vegetation between elevations 7 and 10 ft during construction, and whether this vegetation could be retained. To fulfill this request, cbec conducted a study of existing levee vegetation within the inlet zones between elevation 7 and 10 ft with the following objectives:

- Identify existing vegetation that provides valuable habitat at the proposed inlet locations between elevations 7 and 10 ft.
- Evaluate potential impacts to inlet integrity based on location and density of vegetation within the proposed inlets.
- Develop a design rationale for treatment of existing vegetation at proposed inlet locations between elevations 7 and 10 ft.

Efforts to perform this survey and evaluation included:

- Photo survey of a variety of potentially suitable vegetation and coordination with ICF to identify vegetation that provided valuable habitat species
- Up to 3 days of field survey to identify and locate vegetation between 7-10 ft elevation, record data on diameter, shape, and continuity with other vegetation, and local revetment condition.
- Creation of summary shapefiles

The data review, vegetation evaluation, and determination of compatibility with inlet design were summarized in a technical memorandum (TM), presented to HDR as "12-1001_Inlet_vegetation_survey_030714."
9.2 – Inlet Riprap Condition Assessment (RCA)

This task was intended to supplement the previous Revetment Condition Assessment (RCA) (cbec, 2012) prepared for the Southport EIP. It provided a revetment condition assessment for proposed inlets located in segment C, which were not included in the scope of the initial RCA because the levee in segments C, D, and E was to be degraded under the design that was current when the RCA was authorized. The proposed inlets in segments D and E were also excluded from the initial RCA and were not included with this effort as the existing levee in segment D will become remnant levee under the current project and because there is no visible revetment in segment E. In addition to reporting in detail on the condition of revetment, cbec provided recommendations for treatment of the existing river bank at proposed inlet locations.

A field survey was conducted in which revetment data were collected along transects at inlets N1, S1, and S2. At each transect, cbec performed the following:

- Delineated the landward extent of riprap
- Collected topographic data along transects
- Performed a Wolman pebble count
- Measured thickness of riprap at 3 locations on each transect
- Collected sample rocks from each transect
- Provided photo documentation of each transect

After the survey, cbec post-processed and evaluated data from the survey, which included the following tasks:

- Created transect profile exhibits (CAD) to summarize survey data
- Created particle size distribution charts based on measured rock dimensions
- Created transect photo summary figures
- Calculated the density of collected rock samples
- Calculated the required theoretical riprap size based on site conditions
- Compared RCA survey data to prior surveys (side-scan sonar and sub-bottom profiling) to provide a comprehensive evaluation of revetment condition

The survey data and evaluations were summarized in the TM "12-1001_Supplemental_Revetment_Condition_Assessment_Technical_Memorandum_Draft_042514." The TM provided a summary of existing conditions and a revetment evaluation, similar to the previous RCA, and added recommendations for rock treatments at inlets in the 7-10 ft elevation range to inform inlet designs.
9.3 – SAM Analysis

cbec performed peer review and advisement to ICF during the preparation of the SAM analysis. Efforts included:

- Review of SAM documentation and calculation tool
- Coordination with ICF to clarify existing conditions
- Coordination with ICF to clarify proposed conditions (i.e., design elements and their characteristics and extent). Included data transfer, and preparation of new CAD sections and linework detailing inlet treatments.
- Coordinated with ICF to add habitat value to erosion repair designs, and revised design sections accordingly

9.4 – Geomorphic Input to Final Design

cbec conducted modeling and analysis to determine whether modifications to the offset configuration and an alternative inlet configuration will reduce shear stress and velocities at the inlets and further reduce the requirement for rock protection at the inlets.

- **Offset Configuration**: An earthen weir will bisect the offset area between the inlets creating “cells” within the offset areas. These cells are intended to allow for a backwater condition at Sacramento River flows less than the 2-year event and a flow-through condition at flows greater than the 2-year event as the weirs are overtopped. The crest elevation will be set to 20 feet NAVD 88 with a top width of 20 feet and 10:1 side slopes.
- **Alternative 2**: cbec proposed modifying Alternative 1 (then-current 65% design inlet configuration) to include more woody vegetation and less rock protection. The rock protection for the floodplain apron zones and riverbank zones will be replaced by plantings of woody riparian species using the same planting palette as for similar elevations on the offset floodplain. Similar plant materials (e.g., cuttings, rootstock or container plants) would be used and similar planting and establishment measures (e.g., irrigation) would be employed except a layer of biodegradable erosion control blanket (e.g., heavy jute netting) would be used to protect the bare soil surface from erosion during overflow events during the period of establishment.
- **Modeling**: cbec approximated the proposed weir geometry for the cellular concept and the inlet Alternative 2 in the MIKE 21C model and simulate the 2- and 25-year events. We examined the performance of the cellular concept and inlet alternative simultaneously by running the MIKE 21C sediment transport model with an unlimited erodible layer thickness (~50 ft) on all unprotected portions of the floodplain landward of the inlet crest. Two vegetation scenarios were analyzed for Alternative 2: immediately after planting and mature vegetation. For the initial “just planted” scenario, roughness values (Manning n or equivalent coefficients) were assigned to the vegetated portions of the river bank zones and floodplain apron zones that are similar to those used for the just planted portions of the offset (n = 0.040). For the mature vegetation scenario, Alternative 2 was simulated by assigning roughness to the vegetated portions of the inlets that are appropriate for densely forested floodplains (n = 0.10) with lower (~0.04) roughness values assigned to selected cells to simulate the formation of
West Sacramento Southport EIP
cbec, inc., eco engineering, Scope of Work – Task Order 4 – Augmentation 2

concentrated flow paths through dense vegetation. Furthermore, the sediment size gradations for the concentrated flow paths were based on sieve analyses of soils comprising the existing levee and floodplain. Model results were post processed and model output parameters (shear, velocity etc) were compared to model outputs from the CMA2 offset (Alternative 1 – current design) results. The relative change in the erosion potential and the need for erosion protection was assessed for the inlets and the earthen berms under this alternative.

This effort was summarized in the TM entitled “Analysis of alternatives for inlet erosion protection”.

**9.5 – Project Management and Coordination**

cbec participated in various meetings including bi-weekly team meetings, offset meetings, environmental stakeholder meetings, DWR meetings, and public meetings. This task also includes general day-to-day project management and coordination with the project team associated with additional tasks 9.1 to 9.4. It also specifically includes project and staff coordination, scope, schedule, and budget management.

**10 – REVISE OFFSET DESIGN CONFIGURATION – OPTIONAL TASKS**

This task includes analysis and design associated potential modifications to the design and overall configuration of the northern offset area that may result from unforeseen circumstances.

**10.1 – Geomorphic Input to Final Design**

cbec will provide design support to HDR in order to provide 90% and 100% level design and specifications for an alternative configuration of the northern offset area. cbec will provide items such as modifications to design details, specifications and cost estimates, and provide review of design documents as requested of HDR.

**10.2 – Reporting**

cbec will prepare one additional Draft TM for detailed associated with Task 10.1. The TM will cover methodologies, results and interpretation. The draft TM will be delivered to HDR electronically for review. Based on one set of collated comments, cbec will produce a Final TM within two weeks of receipt of comments. The TM can be incorporated into HDR’s project deliverable reports upon request.
ESTIMATED PROJECT BUDGET SUMMARY

Southport EIP - Single and Multiple Inlet Budget Summary

cbec Project # 12-1001

<table>
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<tr>
<th>Task #</th>
<th>Task Description</th>
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<th>Option 1: Single Inlet</th>
<th>Option 2: Revised Design Configuration</th>
<th>Option 3: Residencivity Time Analysis</th>
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It is assumed that options 2 and 3 may be included as an optional task with either the multiple inlet or single inlet Design. Both base and option 1 or 2 costs are in EIP and option 1 or 2 may be used in the remaining Project budget. Option 3 is a single inlet design of $1,703.75, of which $777.50 is allocated to mitigation enhancement design as required by the FESSRO grant.
### ESTIMATED LABOR FEES

**Southport EIP - Single and Multiple Inlet Budget Summary**

cbec Project # 12-1001

Unless expressly provided within the contract, rates are subject to increase annually on January 1 of each year.

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<th>Senior Eco-Engineer / Eco-Hydrologist</th>
<th>Principal Eco-Engineer / Principal Eco-Hydrologist</th>
<th>Senior Technician</th>
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**Total** Subtotal Labor Hours: 158 Subtotal Labor Fee Per Task: $372,375.00
ESTIMATED REIMBURSABLE EXPENSES

Southport EIP - Single and Multiple Inlet Budget Summary
cbec Project # 12-1001

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Subtotal Reimbursables $11,250.00
Administrative Charge (8%) $900.00
Total Reimbursables $12,150.00
ICF Proposal
August 1, 2014

Serge Jimenez, PE
HDR
1325 J Street, Suite 1300
Sacramento, CA 95814

Subject: Contract Amendment Request for Environmental Services for WSAFCA’s Southport Project

Dear Mr. Jimenez:

This request formalizes recent correspondence regarding continued environmental compliance services for the Southport Project. The tasks presented below follow the structure and numbering to correspond with HDR’s larger team proposal.

This scope and cost proposal generally represent work expected to complete the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes, and associated permits necessary for certifying the CEQA document and facilitating a record of decision for NEPA. However, please note that additional work would be required prior to construction and during construction to comply the terms, conditions, and commitments per CEQA and NEPA and associated permits.

One specific example relevant to this proposal is in the area of cultural resources. Work associated with cultural resources is complete to the degree to allow finalization of the CEQA process and to execute a programmatic agreement under Section 106 of the National Historic Preservation Act (NHPA), required for issuance of the record of decision under NEPA; however, the programmatic agreement stipulates a number of work items that would need to be completed prior to and during construction. This additional work is generally not included in this proposal and is assumed to be part of future services associated with construction. One reason for this approach is that cultural resources are highly site-specific and full compliance requires on-site surveys and rights of entry were not available and were not necessary to complete CEQA and NEPA. The key exception in this proposal is that the additional services to comply with the programmatic agreement for the Village Parkway project element are included; i.e., Village Parkway would be taken to a greater state of compliance and completion under this scope than the rest of the Southport project. This approach is proposed in the event that Village Parkway is desired as a separable project element in advance of other construction.
This amendment does not invalidate or de-obligate existing authorizations.

The task descriptions are below, corresponding to the attached cost estimate.

**Task 1. Project Management**

**Objective.** To continue support to the project team, advise on environmental issues, and administer contract requirements.

**Methods.** ICF will participate in the established and ad hoc meetings among the consultant team and with WSAFCA toward development of completion of the project. This includes in-person meetings and conference calls.

**Deliverables.**
- Agendas and summaries as required.

**Task 7. Environmental Documentation and Permitting**

**Subtask 7.1 Administrative Draft EIS/EIR Reflecting the Interim Condition**

**Objective.** To revise the EIS/EIR to include the interim condition feature at the request of USACE and WSAFCA.

**Methods.** ICF will prepare additional EIS/EIR Review Iterations. Prior to release of the Draft EIS/EIR, ICF will modify the proposed project and its alternatives to add the interim condition feature. Effort will consist of a major restructuring of the then-existing administrative draft EIS/EIR and two additional administrative draft iterations. Additional efforts will be performed to support increased coordination with USACE, revisions to the project description, reconsideration and redrafting of environmental impacts, and modifications to graphics.

**Deliverables.**
- Preliminary Administrative Draft EIS/EIR for review by the WSAFCA team.

**Subtask 7.2 Administrative Final EIS/EIR Revision**

**Objective.** To revise the EIS/EIR to include project design refinements at the request of WSAFCA.

**Methods.** Prior to release of the Final EIR, ICF will prepare an additional project description iteration, the RAPA (Revised Application Preferred Alternative). The RAPA PD will be incorporated into an additional Administrative Final EIS/EIR iteration and its environmental effects analyzed as part of Volume II, Response to Comments. ICF will also revise the Habitat Mitigation and Monitoring Plan, and append it to the Administrative Final EIS/EIR as part of this effort.
This task is also necessitated by ICF’s Risk Assessment effort, which identified a series of items for increased scrutiny and team resolution. ICF will lead the effort to identify public comments for resolution, gather additional data, perform analysis, and draft proposed revisions to the EIS/EIR.

**Deliverables.**
- Administrative Final EIS/EIR for review by the WSAFCA team and USACE.

**Subtask 7.3 Administrative Draft Biological Assessments (BA) to Reflect the 90% Lite Date Set (RAPA)**

**Objective.** To revise the ESA consultation documents consistent with project design refinements in the EIS/EIR.

**Methods.** Following completion of the RAPA design, ICF will revise the BAs for both the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (USFWS) to reflect the effects of RAPA implementation and the inclusion of the interim condition, and will resubmit the BAs to USACE to reinitiate ESA consultation. Revisions include the reconsideration and redrafting of the analysis, particularly focusing on changes in erosion control and rock slope protection, and modifications to graphics.

**Deliverables.**
- Draft revised BAs for review by the WSAFCA team.
- Revised BAs for action by USACE.

**Subtask 7.4 Revised Permit Applications**

**Objective.** To revise Clean Water Act and California Fish & Game Code (CF&GC) permit applications consistent with design refinements in the EIS/EIR.

**Methods.** ICF previously prepared draft permit applications under the Clean Water Act and California Fish & Game Code. Inclusion of the RAPA, as well as other subsequent design changes, will necessitate revision and resubmission of the permit applications, including revisions to the project description, impact analysis and calculations, and to graphics. Work will include coordination with Central Valley Regional Water Quality Control Board (RWQCB) and the California Department of Fish and Wildlife (CDFW).

**Data Needs.**
- GIS data for any design changes subsequent to the RAPA.
- Supporting information for material quantities to be placed and excavated.

**Deliverables.**
- Draft permit applications for WSAFCA review.
- Final permit application packages for action by the RWQCB and CDFW.
Subtask 7.5  Environmental Clearances for Interim Village Parkway

This future task includes CWA Section 404 and 401, CF&GC Section 1602, and ESA/CESA compliance in support of interim Village Parkway (VPW) construction, and is divided into additional subtasks for each environmental clearance required.

Subtask 7.5a—Clean Water Act, Section 404 (USACE)

Objective. To comply with Section 404 of the Clean Water Act (CWA), the project proponent is required to obtain a permit from USACE prior to conducting activities that result in the discharge of dredged or fill material into waters of the U.S. Certain activities involving minor discharges into waters of the U.S. are authorized by Nationwide Permits (NWPs). This scope assumes the project will qualify for NWP 14 (linear transportation projects).

Methods. We will prepare and submit to USACE a preconstruction notification package (PCN) that details the project need and purpose, project description, project impacts to waters of the U.S, and demonstrates compliance with all terms and conditions of the NWP, including information regarding compliance with Section 401 of the CWA, the Endangered Species Act (ESA), and Section 106 of the National Historic Preservation Act (NHPA). We will also identify if impacts to wetlands can be mitigated through purchase of credits at a local approved mitigation bank or through an in lieu fee program. We will use the technical studies prepared for the Southport EIP to provide supporting documentation. Once submitted, we will coordinate with WSAFCA and USACE to assist with nationwide permit authorization.

ICF will conduct preliminary research necessary to determine options for compensatory mitigation for permanent losses to wildlife habitats and/or waters of the U.S. Negotiation of final agreements for purchasing of credits or other compensation is not included in our scope.

Assumptions.
- The project will not result in the loss of greater than 0.5 acre of waters of the United States, including wetlands.
- USACE will consider the construction of Village Parkway to be a single and complete project.
- Compensation for loss of waters of the United States will be achieved through the purchase of mitigation credits through a local USACE-approved mitigation bank. Banks that sell wetland credits and service the area include the Cosumnes Floodplain and Toad Hill Ranch.

It is further assumed no substantial changes will be made to the project area following submittal of the application.

Deliverables.
Draft PCN Package in electronic form for review by WSAFCA (including, PCN form, impact maps, photographs, and the proposed compensatory mitigation plan.

Final PCN Package in electronic and hard copy for action by USACE (including, as needed, an application form, preconstruction notification, impact maps, and a mitigation/restoration plan).

**Data Needs.**
- 100% design prior to developing the draft permit application (digital [GIS shapefile or AutoCAD drawing] and reduce-size hard copy).
- Engineered drawings showing plan profile and cross sections of each culvert crossing or at minimum a typical drawing representing the culvert crossings.

**Subtask 7.5b—Federal Endangered Species Act (U.S. Fish and Wildlife Service)**

**Objective.** The project is proposed in an area known to have the potential for species and their habitat protected under the federal Endangered Species Act (ESA), as administered by the U.S. Fish and Wildlife Service (USFWS). ESA compliance is required prior to the issuance of a CWA Section 404 permit.

**Methods.** ICF will prepare a biological assessment (BA) for USACE that will address valley elderberry longhorn beetle and giant garter snake. The BA will include descriptions of the proposed action, suitable or occupied habitat that may be directly and indirectly affected, the manner in which the action may affect listed species or critical habitat, and proposed measures to minimize or avoid adverse effects. The BA is intended to provide incidental take coverage.

**Assumptions.** Consultant will use information from the BA for the Southport EIP as the basis for the Village Parkway BA. Consultant assumes that any potential impacts to federally listed species can be avoided and/or mitigated through project design elements. If USFWS concludes that compensatory mitigation is necessary for the loss of species habitats, it is assumed that WSAFCA will purchase mitigation credits through a local mitigation bank.

It is further assumed no substantial changes will be made to the project area following submittal of the application.

**Deliverables.**
- Draft BA for review by WSAFCA and USACE.
- Revised BA for review by USFWS.
- Revised BA for action by USFWS.

**Data Needs.**
100% design prior to developing the draft BA (digital [GIS shapefile or AutoCAD drawing] and reduce-size hard copy).

**Subtask 7.5c—Cultural Resources**
All Cultural Resources technical work will be conducted in accordance with the programmatic agreement (PA) for the overall Southport project. ICF will coordinate with the United States Army Corps of Engineers (Corps) to identify an appropriate area of potential effects (APE), within which direct or indirect effects on cultural resources could result from the VP Project. After identifying an appropriate study boundary ICF will complete the following tasks:

- **Prepare APE Maps**–ICF will prepare a draft and final version of an APE map for the VP Project in coordination with an USACE cultural resource specialist. It is assumed that the Archaeological APE will conform to the outer limits of the widest improvement footprint. The Built Environment APE will account for both potential direct and indirect effects for buildings and structures located within or adjacent to the project footprint that are 50 years of age or older. ICF will complete the field inventory task after the Corps has approved the Draft APE map.

- **Field Inventory**–ICF will inspect all buildings, structures, landscapes (built environment resources) within the APE and document them with photographs and written notes. ICF archaeologists will conduct an intensive pedestrian survey of the APE. Any archaeological resources found to be located within the APE will be documented and any previously recorded resources will be relocated. Under this task, ICF will also prepare and organize all files and maps in preparation for, prior to the field survey. Likewise, field notes and photographs will be organized upon return from the survey.

- **Additional Background and/Property-Specific Research**–ICF conducted a records search for the entire Southport Project area in June 2011. ICF will review the material from the records search that is relevant to the VPW footprint. In addition, ICF will consult historic maps, including but not limited to grant/rancho plat maps, in an effort to identify areas within the VPW footprint that may be sensitive for cultural resources. ICF historians will conduct background research on built resources within the Project Area APE, using property research search programs, historic maps, city directories, and materials available through local repositories, including, but not limited to, the California History Room at the California State Library in Sacramento, and other common online research tools.

- **Native American and Historical Society Consultation**–ICF will conduct any necessary consultation with potential interested parties in Yolo County according to the PA.

- **DPR 523 Forms**–ICF will prepare a DPR 523 recordation form for each building or structure within the APE that is 50 years of age or older. The forms will describe the property and analyze its potential for listing in the NRHP and/or the CRHR. ICF will prepare a DPR 523 recordation form for any previously unrecorded archaeological resources found within the APE. Updates will be prepared for any previously recorded resources that are relocated during the inventory. The DPR forms will be included as appendices to the Cultural Resources Inventory report.

- **Prepare a Cultural Resources Inventory Report**–The report will briefly describe the VPW project and APE in text and in figures. The inventory report will include environmental, prehistoric, and ethnographic contexts, as well as a focused historic context focusing on the development of the Project Area in order to provide a context in
which cultural resources can be properly evaluated under NRHP and CRHR criteria. The report will also summarize the results of the record search/background research as it pertains to the specific project area and will include methods and results of the archaeological inventory and a table that lists all buildings and structures that are more than 50 years old, indicating which do and do not meet eligibility for listing in the NHPA and/or CRHR according to criteria listed in Section 106 of the NHPA and CRHR.

**Subtask 7.5d—Clean Water Act, Section 401 (RWQCB)**

**Objective.** Before work can be carried out under the USACE permit, water quality certification under Section 401 of the CWA must be obtained from the Central Valley Regional Water Quality Control Board (RWQCB). The RWQCB also regulates activities that could have an effect on the quality of waters of the State pursuant to the State’s Porter-Cologne Water Quality Act. A 401 Water Quality Certification issued by the RWQCB will constitute compliance with Porter-Cologne.

**Methods.** ICF will prepare the 401 application for review and signature by WSAFCA. Upon WSAFCA authorization, we will submit the application to the Central Valley RWQCB. A certification fee, provided by WSAFCA, must be included in the package. The request for water quality certification is generally submitted at the same time as the PCN (above). The issuance of the Section 401 certification requires completing the CEQA process before certification is provided.

**Assumptions.** The project design (i.e., plans and specifications) will include best management practices (BMPs) to seek avoidance, minimization, or mitigation of effects on water quality. WSAFCA will be required to pay an application and impact fee to RWQCB, separate from this contract.

**Deliverables.**
- Draft request for certification for review by WSAFCA.
- Revised request for certification for action by the RWQCB.

**Data Needs.**
100% design prior to developing the draft request for certification (digital [GIS shapefile or AutoCAD drawing] and reduce-size hard copy).

**Subtask 7.5e—Department of Fish and Wildlife 1602 Agreement**

**Objective.** ICF will prepare a Streambed Alternation Agreement application in compliance with CF&GC Section 1602, which is required when projects will substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake.

**Methods.** The application package will describe the project features, construction period, construction methods, impacts on vegetation, fish, and wildlife, and the proposed
mitigation/restoration plan. The County will be required to pay a notification fee to CDFW. CDFW requires completing the CEQA process before the final streambed alteration agreement is issued.

ICF anticipates that as a requirement of the 1602 agreement, DFW will require revegetation of all temporarily disturbed and new fill areas. For this project we anticipate seeding with native grasses will be sufficient to restore the temporarily disturbed areas.

**Assumptions.** The project design (i.e., plans and specifications) will include best management practices (BMPs) to seek avoidance, minimization, or mitigation of effects on water quality, and wildlife habitats.

WSAFCA will be required to pay a notification fee to CDFW, separate from this contract.

**Deliverables.**

- Draft notification for review by WSAFCA.
- Revised notification for action by CDFW.

**Data Needs.**
100% design prior to developing the draft request for certification (digital [GIS shapefile or AutoCAD drawing] and reduce-size hard copy).

**Subtask 7.6 Utility Bill Inserts**

**Objective.** This work will support the release of the draft EIS/EIR and CEQA/NEPA public notification requirements.

**Methods.** ICF will prepare 15,500 utility bill inserts for public notice of the Southport project.

**Deliverables.**

- 15,500 utility bill inserts for WSAFCA to mail with utility bills.

**Task 20 Environmental Clearances for New or Revised Project Features**

This task anticipates two options for permitting and CEQA/NEPA compliance strategies and execution for incorporation of new and changed project features, including Time Oil site, revised inlet/outlet quantity/location, additional borrow site locations, changed borrow site conditions, and revised marina access plan. The method of compliance for each item will vary, but it is assumed to include an additional Administrative Final EIS iteration to address these additional items as part of the NEPA process. It is also assumed to include preparation, circulation, and finalization of a Supplemental EIR.
Two optional items have been identified to satisfy the range of requirements for this optional task. Either optional task 20.1 or 20.2 will need to be exercised, not both. These items would be scoped more explicitly when the need is determined prior to exercising the optional task.

**Subtask 20.1 Minor Permit Revision with CEQA Technical Addendum (option)**

ICF will modify existing permit packages to include new project elements and prepare a CEQA Technical Addendum for the same.

**Subtask 20.2 Major Permit Revision with CEQA Supplemental EIR (option)**

ICF will modify or amend existing permits or draft permit packages to include new project elements. The Consultant will prepare and circulate Draft and Final Supplemental EIR to address significant new project elements.

Please let me know if you have any questions.

Sincerely,

Christopher C. Elliott
Vice President

Attachment
## Table 1. Cost Estimate for WSAFCA Southport EIP Environmental Task Order 4 Amendment Aug 2014

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**TOTAL**

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<td>24</td>
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All Cultural Resources technical work will be conducted in accordance with the PA for the Southport Project. ICF will coordinate with the Corps to identify an appropriate Area of Potential Effects (APE), within which the Project that could result in direct or indirect effects on cultural resources. After identifying an appropriate study boundary ICF will complete the following tasks.

The separate tasks, which correspond to tasks in the attached cost sheet, are as follows:

ICF will prepare a draft and final version of an APE for this undertaking in coordination with the USACE cultural resource specialist. It is assumed that the Archaeological APE will conform to the outer limits of the widest improvement footprint. The Built Environment APE will account for both potential direct and indirect for buildings and structures located within or adjacent to the project footprint that are 50 years old or older. ICF will complete the field inventory task after the USACE has approved that Draft APE map.

ICF historians will inspect all buildings and structures (built environment resources) within the APE and document them with photographs and written notes. ICF archaeologists will conduct an intensive pedestrian survey of the APE. Any archaeological resources found to be located within the APE will be documented and any previously recorded resources will be relocated.

As part of the inventory effort, ICF archaeologists will conduct subsurface survey of the APE in order to identify any buried archaeological sites that may occur within the project. Subsurface survey will consist of a combination of mechanically excavated trenches, hand augers, hand excavated shovel probes, and observation of any geotechnical boring that may be conducted.

ICF conducted a records search for the entire Southport Project area in June of 2011. ICF archaeologists and historians will review the material from the records search that is relevant to the Project footprint. In addition, ICF will consult historic maps including but not limited to grant/rancho plat maps, in an effort to identify areas within the Project footprint that may be sensitive for cultural resources. ICF historians will conduct background research on buildings within the Project Area APE, when
possible relying upon property research search programs, historic maps, city directories, and other common research tools.

ICF will conduct any necessary consultation with potential interested parties in Yolo County according to the Programmatic Agreement.

ICF historians will prepare a DPR 523 recordation form for each building or structure within the APE that is 50 years or older. The forms will describe the property and analyze its status as a potential “historical resource.” ICF archaeologists will prepare a DPR 523 recordation form for any previously unrecorded archaeological resources found within the APE. Updates will be prepared for any previously recorded resources that are relocated during the inventory. The DPR forms will be included as appendices to the Cultural Resources Inventory report.

The report will briefly describe the project and APE in text and in figures. The inventory report will include environmental, prehistoric, and ethnographic contexts as well as a focused historic context, dealing with the development of the Project Area, in order to provide a context in which cultural resources can be properly evaluated under NRHP and CRHR Criteria.

The report will also summarize the results of the record search/background research as it pertains to the specific phased project area and will include methods and results of the archaeological inventory and a table that lists all buildings and structures that are more than 50 years old, indicating which do and do not meet eligibility for listing on the National Register of Historic Places according to criteria listed in Section 106 of the NHPA.

ICF will prepare a FOE consistent with the guidelines of the Sacramento Corps office and the requirements of 36 CFR 800.11 (e). It is assumed that one built environment resource, the levee, and two archaeological sites within the APE meet the criteria for listing in the National Register of Historic Places (NRHP).

An HPTP will be developed based on the outcome of the Inventory for each phased project. The HPTP will propose specific mitigation to address effects on historic properties that will need to be implemented.

ICF Cultural staff will need to meet and coordinate with the USACE and SHPO regarding efforts involving inventory, evaluation, testing, and creating mitigation plans for cultural resources in the APE and potentially affected by the Project. For the purpose if this scope and cost, ICF assumes not more than 3 offsite meetings, and 6 conference calls.

- A records search for the entire Southport Project Area was conducted by ICF in June of 2011. This Records Search will not need to be updated.
• This scope does not address mitigation. The significant resources have not yet been identified.

• Evaluation of two archaeological resources will be necessary.

• The client will obtain Yolo County Assessor Property Characteristics files for all properties located in the APE that contain buildings and structures. This information will include current property owner names.

• All water-related resources will have been recorded and evaluated through the GRR Project and only the SHPO concurrence letter regarding the RD 900 district will need to be appended to each inventory report.

• Only one built environment resource in the APE, the levee, will meet the criteria for “historical resources” under CEQA or for listing in the National Register under 36 CFR Part 800, within the APE for this undertaking.

• Only one “historic property” will be subjected to an “adverse effect” under 36 CFR 800.

• No more than 18 properties containing built environment resources will be 50 years old or older in the APE and require formal inventory and recordation on DPR 523 Forms.

• Five properties containing built environment resources known to be over 50 years old are located in APE and have been formally inventoried and evaluated on DPR 523 Forms as part of initial studies for the overall Southport Project area.

• ICF will prepare no more than 3 versions of the report (draft, pre-final, and final) for the Inventory and FOE Report, APE map, and DPRs 523 Forms, and Treatment Plan.
## Table 1. Cost Estimate for Southport Levee Construction Phase I

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<td>Task 7. Finding of Effect (FOE)</td>
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### Direct Expenses

- **505.00 Subcontractor**: $12,000
- **521.00 Meals, and Lodging**: $1,500
- **522.00 Airfares**: $150
- **523.05 Travel, Auto, Ind., Mileage at current IRS rate (.56/mile)**: $100
- **523.06 GIS/CAD/MAC**: $250
- **523.07 Surveys and Reports**: $1,400
- **523.08 Per Diem at $175/day**
- **523.09 Project Supplies**: $1,400
- **529.00 Other Reimbursable Expenses**: $15,400

Total price: $193,320
Morrow Proposal
July 25, 2014

HDR
1325 J Street, Suite 1300
Sacramento, CA 95814
ATTN: Richard Haynes

RE: Sacramento River Southport EIP-Sarmento & Watermark Borrow Sites

Dear Rick,

Morrow Surveying can provide Boundary and Topographic Surveys, for the above referenced sites, for a fee of $41,550.00.

Scope and Fee breakdown is as follows:

**Sarmento:** $19,925.00

**Watermark:** $21,625.00

Deliverables for both sites will include:

- existing property corners that are found
- topo on 100 ft. grid
- x-section of adjacent levees, sloughs and ditches at 100 ft. interval or where best suited
- the location existing features; fences, wells, culverts, utilities, drainage structures

Morrow Surveying assumes that the sloughs and ditches will be cleared by the proper authority before the additional work begins.

If you choose to accept this proposal please sign this letter of acceptance, issue a contract and return all of the signed and/or initialed documents to Morrow Surveying as promptly as possible. You can fax the documents to us at (916) 372-8538.
Sincerely,

Matt Morrow

ACCEPTANCE

__________________________________________
DATE

__________________________________________
ACCEPTED BY

__________________________________________
PRINTED NAME

__________________________________________
TITLE

Will this project be subject to prevailing wage under Labor Code 1720?  
YES  NO

Will your firm issue a contract to us for this project?
YES  NO
July 30, 2014

HDR
1325 J Street, Suite 1300
Sacramento, CA 95814
ATTN: Richard Haynes

RE: Sacramento River Southport EIP-PG&E Gas Line-Linden Rd.

Dear Rick,

Morrow Surveying can provide additional Surveying Services, for the above referenced site, for a fee of $6,000.00.

We propose to provide the following scope of services:

**Pothole PG&E Gas Line-Linden Rd.**    $6,000.00

i. Bring subconsultant under contract with Morrow Surveying.
ii. Coordinate hydroexcavations at locations specified by HDR.
iii. Survey top of underground pipes at those locations.

If you choose to accept this proposal please sign this letter of acceptance, issue a contract and return all of the signed and/or initialed documents to Morrow Surveying as promptly as possible. You can fax the documents to us at (916) 372-8538.

Sincerely,

Matt Morrow

1255 Starboard Drive   ☞ West Sacramento, CA 95691-3460 ☞ (916) 372-8124 ☞ fax (916) 372-8538
Will this project be subject to prevailing wage under Labor Code 1720?
YES  NO

Will your firm issue a contract to us for this project?
YES  NO
This Amendment No. 2 to the Contract for Services between the West Sacramento Area Flood Control Agency (Agency) and HDR Engineering, Inc. (Consultant), is made and entered into this 14th day of August, 2014. Except as expressly amended herein, the August 12, 2010 Contract for Services is in full force and effect.

RECITALS

WHEREAS, the Agency and Consultant executed an Indefinite Delivery-Indefinite Quantity (ID-IQ) Contract for Design Engineering Services on August 12, 2010 for the Southport Sacramento River Early Implementation Project with services to be approved and issued on a Task Order basis; and

WHEREAS, the maximum compensation for the ID-IQ Contract was originally set not to exceed $14,430,000; and

WHEREAS, the Agency approved an increase to the maximum compensation of the ID-IQ Contract to $15,678,136 with Amendment No. 1 to adequately cover the cost of issued Task Orders to date; and

WHEREAS, the Agency has authorized Task Orders for design services and the maximum compensation amount will be exceeded with the approval of Amendment No. 4 to Task Order No. 4, requiring increase to the maximum compensation and an extension of contract time to complete the additional work; and

WHEREAS, the Agency and Consultant desire to amend said Contract for Services.

NOW, THEREFORE, IT IS MUTUALLY AGREED by parties hereto to amend said Contract for Services as follows:

I. Section 2A “TERM OF CONTRACT” of the Contract for Services dated August 12, 2010 shall be revised to include the following:

The contract period shall be extended from December 31, 2014 to December 31, 2015.
II. Section 3A “COMPENSATION” of the Contract for Services dated August 12, 2010 shall be replaced with the following:

The Consultant shall be paid monthly for the actual fees, costs and expenses for all time and materials required and expended. Payment shall be based on the fee proposal provided by the consultant and outlined in mutually agreed upon Task Orders, but in no event shall total compensation exceed Seventeen Million Six Hundred Ninety Five Thousand Five Hundred Dollars ($17,695,500), without WSAFCA’s prior written approval.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as the date herein set forth.

WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

By: ____________________________
    William Denton, WSAFCA President

HDR ENGINEERING, INC.

By: ____________________________
    Holly Kennedy, P.E., Associate Vice President

APPROVED AS TO FORM

By: ____________________________
    James M. Day, Jr., WSAFCA Attorney

By: ____________________________
    Philip A. Wright, WSAFCA Treasurer
WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

MEETING DATE: August 14, 2014

ITEM # 10

SUBJECT:
CONSIDERATION AND ADOPTION OF RESOLUTION 14-08-01 CERTIFYING THE ENVIRONMENTAL IMPACT REPORT, ADOPTING FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPTING MITIGATION MONITORING & REPORTING PLAN FOR THE SOUTHPORT SACRAMENTO RIVER EARLY IMPLEMENTATION PROJECT; AND APPROVAL OF THE SOUTHPORT SACRAMENTO RIVER EARLY IMPLEMENTATION PROJECT Refined Applicant Preferred Alternative

INITIATED OR REQUESTED BY: REPORT COORDINATED OR PREPARED BY:
[ ] JPA Board John Powderly, Associate Planner
[ X ] Staff Greg Fabury, Flood Protection Manager
[ ] Other Denixe Anbiah, Public Works Director

ATTACHMENT [X] Yes [ ] No [ ] INFORMATION [ ] DIRECTION [X] ACTION

OBJECTIVE
Obtain the JPA Board’s approval of the environmental impact analysis documents for the Southport Sacramento River Early Implementation Project (“EIP”) and approval of the Refined Applicant Preferred Alternative (“Refined APA”).

RECOMMENDED ACTION
It is respectfully recommended that the JPA Board:

1. Adopt Resolution 14-08-01, and by doing so:
   - Find that the Southport Sacramento River Early Implementation Project Environmental Impact Report (“EIR”) reflects WSAFCA’s independent judgment and analysis as the lead agency under the California Environmental Quality Act;
   - Find that the public health, safety, and general welfare warrant the certification of the EIR, Findings of Fact and Statement of Overriding Considerations, and Mitigation Monitoring & Reporting Plan for the EIP;
   - Certify the EIR for the EIP; and
   - Adopt the Findings of Fact and Statement of Overriding Considerations and the Mitigation Monitoring & Reporting Plan for the EIP.
2. Approve the Refined Applicant Preferred Alternative for final design and ultimate construction of the Southport Sacramento River Early Implementation Project.

BACKGROUND
The JPA Board authorized staff to proceed with design, environmental analysis, and permitting for the Southport Sacramento River Early Implementation Project on August 12, 2010, with the approval of a contract with HDR Engineering, Inc. to provide professional services for the EIP. Task Orders 1, 2, and 3 under the contract have been completed. Task Order 4 is in progress. HDR is developing the 90% Plans, Specifications, and Opinions of Probable Construction Cost.

The Southport Sacramento River EIP extends approximately 5.6 miles along the Sacramento River from the termination of the USACE Sacramento River Bank Protection Project at River Mile 57.2R in the north to the South Cross Levee, at the City’s southern boundary. The primary purpose of the Southport project is to reduce flood risk for the entire city of West Sacramento by addressing known levee deficiencies along the Sacramento River South Levee in the project area. Specific levee deficiencies identified at the Southport project site relate to erosion, geometry, through-seepage, and under-seepage. The overall project area includes the footprint in
which flood risk–reduction measures would be constructed, the footprint for interim Village Parkway construction, and potential borrow sites (Attachment 1A, Volume I, Plate 1-5). Potential borrow sites overlap large portions of the construction footprint, as fill material may be obtained from these areas prior to or during construction of the flood risk–reduction measures.

To comply with both the National Environmental Policy Act ("NEPA") and the California Environmental Quality Act ("CEQA"), a joint Environmental Impact Statement/Environmental Impact Report ("EIS/EIR") for the EIP was developed in partnership with the US Army Corps of Engineers. Public Scoping for the EIS/EIR occurred in August and September of 2011. A Draft EIS/EIR addressing the impacts of the EIP was released for public review and comment on November 8, 2013. The public comment period continued until January 6, 2014. Forty-two comment letters were received on the Draft EIS/EIR. The Final EIR was released with this staff report and the posting of the agenda for the August 14, 2014 WSAFCA Board meeting.

Subsequent to the release of the Draft EIS/EIR, development of the Southport project design continued to advance. Engineering analyses revealed that the footprint of proposed flood risk–reduction measures could be reduced from what was proposed in the Draft EIS/EIR. The refined project design is described in the Final EIR as the Refined Applicant Preferred Alternative (Attachment 1A, Volume II, Chapter 6). The Refined APA is based on Alternative Five, the Applicant-Preferred Alternative, in the Draft EIS/EIR.

**ANALYSIS**

The EIR indicates that the EIP will have several potentially significant impacts. With mitigations and other adjustments to the project, most of these impacts can be reduced to a less-than-significant level. However, even after mitigation and other adjustments, the following impacts remain significant:

- Increase in construction-related traffic noise along haul routes;
- Air Quality due to construction emissions;
- Exposure to construction-related noise and vibration;
- Removal of riparian vegetation due to placement of erosion control revetment at locations where existing levee will be breached;
- Impacts to fish habitat due to removal of riparian vegetation and shaded-riverine aquatic cover;
- Loss of developable land and conflict with existing land use designations within project footprint;
- Loss of farmland and agricultural production;
- Displacement of residents;
- Deterioration to views and glare due to construction and levee features;
- Impact to the existing levee, an historic structure; and
- Potential impacts to archaeological or cultural resources, or human remains

Pursuant to the California Environmental Quality Act (CEQA), an agency certifying an EIR and approving a project with significant-and-unavoidable impacts must make specific findings. The required findings are contained in the Findings of Fact and Statement of Overriding Considerations (Attachment 1B). CEQA also requires an agency to adopt a mitigation monitoring plan to track compliance with the various mitigations and environmental commitments in a project (Attachment 1C). Adoption of both the Findings of Fact and Statement of Overriding Considerations as well as the Mitigation Monitoring & Reporting Plan is part of the recommended action. Upon certification of the EIS/EIR and adoption of the Findings of Fact and Statement of Overriding Considerations and Mitigation Monitoring & Reporting Plan by the Board, a Notice Of Determination will be filed with Yolo County, Sacramento County, and the State Office of Planning and Research for this project.

WSAFCA’s goal is to achieve a minimum of 200-year flood protection by improving the levees protecting West Sacramento. The purpose of the EIP is to continue WSAFCA’s efforts to incrementally implement improvements, in manageable elements, to meet that goal. Staff’s recommendation of approval is based on the project’s ability to address the levee deficiencies, utilize available funding, minimize environmental effects, and similar considerations. By approving the EIP, WSAFCA is taking action to incrementally reduce risk and improve the level of flood protection for the city. This project, and early implementation projects generally, have been
proposed and implemented in advance of federal authorization of the West Sacramento General Re-evaluation Report. In combination, the early implementation projects and actions under the GRR will achieve WSAFCA's flood protection goal.

Alternatives
The Board may elect to proceed with the Southport Sacramento River EIP Refined APA. This is staff's recommended action.

The Board may elect to proceed with one of the other alternatives analyzed in the Final EIR, and direct staff to return with Findings of Fact, Statement of Overriding Considerations, and Mitigation Monitoring & Reporting Plan to support the Board's selected alternative. However, because the Refined APA is the Environmentally Superior Alternative, such action would increase the impacts of the project and could cause delay in flood protection improvements for the city.

The Board may elect to direct staff to make changes to the Refined APA; however such action could delay flood protection improvements for the city, since it could require revisions to the Final EIR as well as the Findings of Fact, Statement of Overriding Considerations, and Mitigation Monitoring & Reporting Plan to support the Board's direction.

The Board may elect not to proceed with the Southport Sacramento River EIP at this time; however such action would delay flood protection improvements for the city.

Coordination and Review
This project has been coordinated with the US Army Corps of Engineers, California Department of Water Resources, the Central Valley Flood Protection Board, California Department of Fish & Game, as well as other affected agencies. The report was coordinated with WSAFCA staff, the project consultant team, WSAFCA Counsel and the WSAFCA Treasurer.

Budget/Cost Impact
Certification and adoption of the EIS/EIR, Findings of Fact and Statements of Overriding Considerations, and Mitigation Monitoring & Reporting Plans, in itself, will not have any fiscal impacts.

The estimated cost for the Southport Sacramento River EIP, based on the 65% opinion of probable cost, is $180,000,000 and will be funded by a combination of Proposition 1E funds, West Sacramento flood assessment revenue, and the West Sacramento “in-lieu” fee.

ATTACHMENTS
1. Resolution 14-08-01, with Exhibits:
   A. Sacramento River Southport EIP Environmental Impact Report (also available at the City of West Sacramento Civic Center (City Hall), Arthur F. Turner (Yolo County) Library, Sacramento County Library, and on the internet at:
   B. Findings of Fact and Statement of Overriding Considerations
   C. Mitigation Monitoring & Reporting Plan
RESOLUTION 14-08-01


WHEREAS, WSAFCA is a Joint Powers Authority comprised of the City of West Sacramento, Reclamation District (RD) 900 and RD 537 for the purposes of constructing the improvements necessary to enhance the West Sacramento Levee System, including the levees along the Sacramento River, and

WHEREAS, in 2005 the US Army Corps of Engineers promulgated new Federal criteria for the design of levees and other flood protection structures, and

WHEREAS, WSAFCA commissioned a levee study to evaluate the entire West Sacramento Levee System,

WHEREAS, the study determined that substantial improvements to the system must be made to meet the new Federal criteria and protect the lives and livelihoods of those living and working in West Sacramento, and

WHEREAS, on August 12, 2010, the Board of Directors of the West Sacramento Area Flood Control Agency approved a contract with HDR Engineering, Inc., for professional services to design the improvements and prepare the environmental impact analysis and permitting documents necessary to improve the Southport Sacramento River Levee, and

WHEREAS, HDR is completing the construction plans for the levee improvements for the EIP, and

WHEREAS, WSAFCA has had a draft EIR prepared, as a joint Environmental Impact Statement (“EIS”)/EIR with the U.S. Army Corps of Engineers, which evaluates the project-specific impacts of the EIP, and

WHEREAS, the draft EIS/EIR addressing the impacts of the EIP has been prepared and circulated for comments in accordance with the California Environmental Quality Act (“CEQA”), CEQA Guidelines, and all other applicable laws and regulations; and

WHEREAS, public comment meetings regarding the EIP and the draft EIS/EIR were held on December 11, 2013, and December 18, 2013; and

WHEREAS, the initial public and agency comment period on the draft EIS/EIR was completed on January 6, 2014, and both public and agency comments have been incorporated into the EIR attached as Exhibit A, and

WHEREAS, the Board of Directors of WSAFCA has reviewed the EIP and the EIR attached as Exhibit A.
NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the West Sacramento Area Flood Control Agency that:

Section 1: WSAFCA hereby finds that the recitals set forth above are true and correct, and incorporate these recitals herein by reference.

Section 2: the final EIR reflects WSAFCA’s independent judgment and analysis.

Section 3: WSAFCA hereby finds that the public health, safety, and general welfare warrant the certification of the final EIR, Findings of Fact and Statement of Overriding Considerations, and Mitigation Monitoring & Reporting Plan for the EIP.

Section 4: WSAFCA hereby certifies the EIR (attached as Exhibit A) as final and adopts the Findings of Fact and Statement of Overriding Considerations (Exhibit B), and adopts the Mitigation Monitoring and Reporting Plan (Exhibit C).

PASSED AND ADOPTED by the Board of Directors of WSAFCA this 14th day of August, 2014, by the following vote:

AYES: 
NOES: 
ABSTAIN: 
ABSENT: 

William E. Denton, President 

ATTEST: 

APPROVED AS TO FORM: 

Kenneth A. Ruzich, General Manager 
James Day, Jr., WSAFCA Attorney 

Philip A. Wright, WSAFCA Treasurer 

{00928267}
WEST SACRAMENTO AREA FLOOD CONTROL AGENCY
SOUTHPORT SACRAMENTO RIVER
EARLY IMPLEMENTATION PROJECT

FINDINGS OF FACT AND STATEMENT OF
OVERRIDING CONSIDERATIONS

PREPARED FOR:

West Sacramento Area Flood Control Agency
1110 West Capitol Avenue
West Sacramento, CA 95691
Contact: John Powderly
916/617-4674

PREPARED BY:

ICF International
630 K Street, Suite 400
Sacramento, CA 95814
Contact: Megan Smith
916/737-3000

August 2014
| 1 | Key Infrastructure and Facilities in West Sacramento | 3-4 |
# Acronyms and Abbreviations

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>AEP</td>
<td>annual exceedance probability</td>
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<tr>
<td>BAAQMD</td>
<td>Bay Area Air Quality Management District</td>
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<td>Board</td>
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<td>BSSCP</td>
<td>bentonite slurry spill contingency plan</td>
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<td>SPCCP</td>
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<td>SWPPP</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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Chapter 1

Introduction

This document provides a brief summary of the Southport Sacramento River Early Implementation Project (EIP) (Southport project or project) and the environmental review process. It contains the Findings of Fact (Findings) of the West Sacramento Area Flood Control Agency’s (WSAFCA) Board (Board) for each significant environmental effect of the project as identified in the FEIR (California Environmental Quality Act [CEQA] Guidelines Section 15091). This document also provides a Statement of Overriding Considerations (Statement), as required by State CEQA Guidelines Section 15093, providing rationale in support of the Board’s determination that the benefits of the project outweigh its unavoidable significant environmental effects.

Project Summary

The Southport project involves the construction of approximately 5.6 miles of flood risk–reduction measures along the Sacramento River South Levee in the city of West Sacramento, Yolo County, California. Flood risk–reduction measures include the construction of a setback levee, a slurry cutoff wall, and seepage berms to address deficiencies of through-seepage, under-seepage, slope stability and geometry, erosion, and encroachments and noncompliant vegetation. WSAFCA’s goal is to achieve a 200-year level minimum of levee performance for the city of West Sacramento. A 200-year flood is a flood that has a 1-in-200, or 0.5% chance of occurring in any given year, or 0.5% annual exceedance probability (AEP).

The primary purpose of the Southport project is to reduce flood risk for the entire city of West Sacramento by addressing known levee deficiencies along the Sacramento River South Levee in the project area. The primary purpose—reducing flood risk—is the top priority during project planning, implementation, operations, and maintenance. Secondary purposes of the Southport project are to provide ecosystem restoration and public recreation opportunities that are compatible with flood risk–reduction measures.

While the Southport project alone would not reduce all flood risks affecting the project area, it would contribute as a significant step toward a greater overall level of performance consistent with Federal and state standards. Specifically, it would provide incremental flood risk–reduction for the entire city and would address the most immediate elevated risk based on the following factors.

- Nature of Sacramento River West Levee being the longest and most contiguous portion of the project area perimeter.
- Location of known levee deficiencies and the clarity and feasibility of available measures to address these deficiencies.
Environmental Review Process

In November 2013, WSAFCA circulated a joint draft environmental impact statement/environmental impact report (EIS/EIR) in compliance with CEQA (Public Resources Code [PRC] Section 21000 et seq.), the State CEQA Guidelines (Title 14, California Code of Regulations [CCR], Section 15000 et seq.), and the National Environmental Policy Act (NEPA). A joint document was prepared in order for the U.S. Army Corps of Engineers (USACE) to prepare an EIS in compliance with NEPA due to USACE’s jurisdiction over the project under the Rivers and Harbors Act and Clean Water Act. Certification of WSAFCA’s final EIR for the project completes the CEQA analysis process; USACE’s NEPA process is currently ongoing. For the purposes of these Findings and Statement, WSAFCA’s and USACE’s environmental documents are referred to herein as draft environmental impact report (DEIR) and final environmental impact report (FEIR), respectively.

The FEIR document consists of two volumes. Volume I contains the DEIR’s alternatives and analysis of effects on resource areas, modified as necessary in response to public comment; Volume II includes comments received on the DEIR, a list of the commenters, responses to comments, a description of the project explaining design refinements that have occurred since the release of the DEIR, and analysis of effects associated with those design refinements. The FEIR identified significant effects of the project and proposed mitigation measures to reduce those effects in the following areas:

- Flood Risk Management and Geomorphic Conditions
- Water Quality and Groundwater Resources
- Geology, Seismicity, Soils, and Mineral Resources
- Transportation and Navigation
- Air Quality
- Climate Change
- Noise
- Vegetation and Wetlands
- Fish and Aquatic Resources
- Wildlife
- Land Use and Agriculture
- Socioeconomics, Environmental Justice, and Community Effects
- Visual Resources
- Utilities and Public Services
- Public Health and Environmental Hazards
- Cultural Resources

The FEIR also identified significant and unavoidable effects in the following areas; for these effects, no feasible mitigation measures are available, or implementation of feasible mitigation measures would not reduce the effect to a less-than-significant level.
Introduction

- Transportation and Navigation
- Air Quality
- Noise
- Vegetation and Wetlands
- Fish and Aquatic Resources
- Land Use and Agriculture
- Socioeconomics, Environmental Justice, and Community Effects
- Visual Resources
- Cumulative Effects on Geology, Seismicity, Soils, and Mineral Resources; Transportation and Navigation; Air Quality; Land Use and Agriculture; and Visual Resources

Having received, reviewed, and considered the FEIR, as well as all other information in the administrative record on this matter, the following Findings are made, and a Statement is adopted by WSAFCA in its capacity as the CEQA lead agency. These Findings and Statement set forth the environmental basis for current and subsequent discretionary actions to be undertaken by WSAFCA and responsible agencies to implement the project.

California Environmental Quality Act Process

In accordance with CEQA Guidelines Section 15082, WSAFCA, as lead agency, circulated a notice of preparation (NOP) for the DEIR on August 24, 2011. The NOP established a 30-day review period that expired on September 26, 2011. The NOP was circulated to the public; local, state, and Federal agencies; and other known interested parties through direct mailing and publication in the Sacramento Bee, West Sacramento News Ledger, and The West Sacramento Press to reach both local and regional public audiences. The NOP was filed with the California State Clearinghouse and both the Yolo County and Sacramento County Clerk Recorder’s offices on August 24, 2011, in accordance with CEQA requirements. The NOP was also posted to the WSAFCA website.

During this 30-day review period, two public scoping meetings were held on September 15, 2011; one from 3:30 p.m. to 5:30 p.m. and one from 6:30 p.m. to 8:30 p.m., at the West Sacramento City Hall Galleria room to inform the public of the proposed Project. Forty-seven comments were received from the public and state and Federal agencies during the public scoping period.

WSAFCA then expanded the proposed study area to include additional soil borrow sites, and a Supplemental NOP for the DEIR was filed with the California State Clearinghouse on March 7, 2013 in compliance with the requirements set forth in CEQA. The Supplemental NOP established a second 30-day public comment period from March 8, 2013 to April 8, 2013. The Supplemental NOP was circulated to the public; local, state, and Federal agencies; and other known interested parties through direct mailing and publication in the Sacramento Bee, West Sacramento News Ledger and The West Sacramento Press. The Supplemental NOP was filed with the California State Clearinghouse and both the Yolo County and Sacramento County Clerk Recorder’s offices on March 7, 2013, in accordance with CEQA requirements. The NOP was also posted to the WSAFCA website.

During the second public review period, one public scoping meeting was held on March 28, 2013 at the West Sacramento City Hall Galleria room from 5:30 p.m. to 7:30 p.m. to receive additional agency
and public comments regarding the revised scope of the environmental analysis for the DEIR. Eighteen comments were received from the public and state and Federal agencies during this second comment period.

Consistent with CEQA, the DEIR for the project was prepared and circulated for a 60-day public comment period (November 8, 2013 to January 6, 2014). WSAFCA prepared a notice of availability (NOA) to signal the availability of the draft EIS/EIR to the public on November 8, 2013. Between November 15 and 18, 2013, the NOA was sent to responsible and trustee agencies in addition to involved federal agencies and parties who previously requested notice in writing through direct mailing. On November 8, 2013, the draft EIS/EIR was filed with the California State Clearinghouse. To comply with NEPA, the NOA was published in the Federal Register on Wednesday, November 20, 2013. The NOA was also filed with both the Yolo County and Sacramento County Clerk Recorder’s offices on November 8, 2013, in accordance with CEQA requirements.

During the 60-day review period of the DEIR, two public meetings were held to inform the public of the project alternatives analyzed in the DEIR and the likely environmental effects of these alternatives. The first meeting was held on December 11, 2013 from 3 p.m. to 5 p.m., and the second was held on December 18, 2013 from 6 p.m. to 8 p.m. Both public meetings were held at the Bridgeway Lakes Boathouse at 3650 Southport Parkway in West Sacramento.

Forty-two comment letters were received from the public and state and Federal agencies on the DEIR. All comments received during the public comment period were addressed in Volume II, "Responses to Comments," of the FEIR. Consistent with CEQA, WSAFCA provided all commenting public agencies with an opportunity to review proposed responses to agency comments at least 10 days prior to certification of the FEIR. Following certification, the full document will be made available to the public on the WSAFCA website and in hard copy form at City Hall and the West Sacramento Community Library, located at 1110 West Capitol Avenue and 1212 Merkley Avenue, West Sacramento, respectively.

Upon approving the project, the Board will adopt these Findings regarding the significant effects and Statement explaining the benefits that outweigh the significant unavoidable impacts identified in the FEIR.

Pursuant to PRC Section 21081.6, the Board will also adopt a Mitigation Monitoring and Reporting Plan (MMRP). The MMRP establishes a program to ensure that the adopted mitigation measures identified in the FEIR will be implemented.

**National Environmental Policy Act Process**

In cooperation with WSAFCA, USACE is preparing a final environmental impact statement (FEIS) under NEPA that considers the environmental effects of the project’s Federal elements. The draft EIS (DEIS) and DEIR were circulated concurrently. The 30-day circulation of the FEIS, as required by NEPA, is anticipated to occur in late fall, 2014. Any additional environmental commitments or mitigation measures that arise from the NEPA process and any additional conditions in WSAFCA’s final permit from USACE will be incorporated into the MMRP. The MMRP will be then be considered a comprehensive document of WSAFCA’s monitoring and reporting requirements.
Chapter 2
Findings of Fact

California Environmental Quality Act Requirements

CEQA, PRC Section 21000 et seq., requires a lead agency to make written findings of project effects (or “effects”) when a lead agency decides to approve a project for which an EIR has been certified (PRC Section 21081). Section 15091 of the State CEQA Guidelines (CCR Title 14) states, in part:

(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effect of the project unless the public agency makes one or more written finding for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

(1) Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

The findings required by subsection (a) shall be supported by substantial evidence in the record.

The documents and other materials that constitute the administrative record upon which WSAFCA based its decision and these findings are held by the City of West Sacramento and can be reviewed at the following location.

West Sacramento City Hall
1110 West Capitol Avenue, Second Floor
West Sacramento, CA 95691

Findings of Fact

In accordance with State CEQA Guidelines Section 15091, the following findings and supporting facts address each significant environmental effect of the project that has been changed (including adoption of mitigation measures) to avoid or substantially reduce the magnitude of the effect as identified in the FEIR. The findings described below are organized by resource issue, in the same order as the effects are discussed in Volume II, Chapter 6 of the FEIR. The findings reference the FEIR (which is part of the record upon which WSAFCA based its decision), project measures,
Findings of Fact

West Sacramento Area Flood Control Agency
Southport Sacramento River Early Implementation Project
Findings of Fact and Statement of Overriding Considerations

August 2014

ICF 00071.11

environmental commitments and mitigation measures. Environmental commitments are listed in Volume I, Chapter 2, Table 2-21 of the FEIR. For specific resource mitigation measures, the section and page number where the full text of the mitigation measure occurs is noted in the finding. Findings of infeasibility for the project alternatives, where relevant, follow the individual effect findings.

Findings Regarding Impacts That Will be Mitigated to Below a Level of Significance (State CEQA Guidelines Section 15091[a][1])

WSAFCA, having reviewed and considered the information contained in the FEIR and pursuant to PRC Section 21081 and State CEQA Guidelines Section 15091(a)(1), adopts the following findings regarding the significant effects of the Southport project.

Effect FC-3: Alteration of Existing Drainage Pattern of Site or Area

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Finding:
3. Implementation of flood risk–reduction measures would involve earthwork on the landside of the existing levee and would cross drainage infrastructure maintained by local landowners or local agencies or directly alter surface runoff patterns.
4. This effect is significant because the alteration of surface runoff patterns and drainage could cause or exacerbate local flooding.
5. Implementation of Mitigation Measure FR-MM-1: Coordinate with Owners and Operators, Prepare Drainage Studies as Needed, and Remediate Effects through Project Design (p. 3.1-29) would reduce this effect to a less-than-significant level.

Effect WQ-3: Effects on Groundwater or Surface Water Quality Resulting from Contact with the Water Table

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Finding:
1. Project construction would involve trenching and excavation associated with a cutoff wall and/or levee reconstruction. These activities could expose the water table and create a path to the groundwater basin that would allow contaminants to enter the groundwater system. In addition, dewatering of the construction area and borrow sites could result in the release of contaminants to surface or groundwater. Uncapped groundwater wells located near construction activities could also provide a direct path to the aquifer.
2. These effects on surface and groundwater quality are significant.
3. The project would adhere to environmental commitments of a Stormwater Pollution Prevention Plan (SWPPP), Bentonite Slurry Spill Contingency Plan (BSSCP), and Spill Prevention, Control, and Countermeasures plan (SPCCP).
4. The combined implementation of environmental commitments and *Mitigation Measure WQ-MM-1: Implement Provisions for Dewatering* (p 3.2-17) would reduce this effect to a less-than-significant level.

**Effect GEO-7: Potential Loss of Soil Productivity and Change in Site Usability of Borrow Areas**

**Findings:** WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Finding:**
1. Large quantities of mineral soils would be removed at borrow sites, which has the potential to directly affect soil quality and indirectly affect future agricultural productivity at excavated sites.
2. These effects on soil quality and future agricultural productivity are significant.
3. Implementation of Mitigation Measure GEO-MM-1, Implement the Reclamation Actions of a Project-Specific Reclamation Plan (p 3.3-13) would reduce this effect to a less-than-significant level.

**Effect AIR-3: Violate Any Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation—NEPA**

**Findings:** WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**
1. The project’s annual construction emissions could cause exceedance of the Federal General Conformity thresholds for nitrous oxide (NO\(_X\)) within the Sacramento Valley Air Basin during construction.
2. The effect as a result of construction emissions would be significant because it results in unmitigated emissions that exceed designated thresholds for NO\(_X\).
3. Implementation of *Mitigation Measures AIR-MM-1: Implement Measures to Reduce Exhaust Emissions of NO\(_X\) and PM10* (p. 3.5-21), *AIR-MM-2: Implement Fugitive Dust Control Plan* (p. 3.5-23), and *AIR-MM-4: Mitigate and Offset Construction-Generated NO\(_X\) Emissions to Net Zero (0) for Emissions in Excess of General Conformity de Minimis Threshold (Where Applicable) and to Quantities below Applicable YSAQMD and SMAQMD CEQA Thresholds* (p. 3.5-24), would reduce this effect to a less-than-significant level.

**Effect AIR-5: Expose Sensitive Receptors to Substantial Fugitive Dust Concentrations**

**Findings:** WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**
1. Implementation of the project would result in short-term dust emissions from grading and earth moving activities at the project construction sites and the soil borrow sites.
2. The effect would be significant because it would expose nearby land uses, especially residences located downwind of the project sites, to dust generated during construction activities, resulting in potential adverse health effects.
3. Implementation of Mitigation Measure AIR-MM-2: Implement Fugitive Dust Control Plan (p. 3.5-23) would reduce this effect to a less-than-significant level.

Effect NOI-3: Exposure of Sensitive Receptors to Traffic Noise from the Extension of Village Parkway

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Implementation of the Project would include an extension of Village Parkway, previously planned under the Southport Framework Plan, which would directly expose land uses within approximately 100 feet of the roadway to traffic noise that exceeds 60 Ldn.
2. The FEIR states that the noise analysis presented in the Southport Framework Plan draft EIR (Willdan Associates 1994) indicates that this effect would have a significant effect on residences within 100 feet of the new Village Parkway alignment.
3. Implementation of Mitigation Measure M.M. 4-8.1 (p. 4.8-14 of the Southport Framework Plan draft EIR) would reduce this effect to a less-than-significant level.

Effect VEG-2: Loss of Waters of the United States as a Result of Project Construction

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Implementation of the Project would result in permanent fill of waters of the United States, including a perennial drainage and unvegetated agricultural and roadside ditches.
2. The effects of direct removal, filling, and hydrological interruptions of waters of the United States would be significant.
3. The Project would adhere to the environmental commitment for the preparation of a SWPPP.
4. The combined implementation of the environmental commitment, and Mitigation Measures VEG-MM-2: Install Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species (p. 3.8-27), VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel (p. 3.8-27), VEG-MM-4: Retain a Biological Monitor (p. 3.8-28), and VEG-MM-5: Compensate for the Loss of Waters of the United States (3.8-29) would reduce this effect to a less-than-significant level.

Effect VEG-3: Disturbance or Removal of Protected Trees as a Result of Project Construction

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Implementation of the project would result in the disturbance or removal of numerous trees that may be considered heritage trees under the City’s Tree Preservation Ordinance and are also considered riparian habitat.
2. The trees would fall within the project disturbance footprint. This effect is significant because the City of West Sacramento has enacted an ordinance to protect trees that meet certain heritage or landmark definitions.

3. WSAFCA will adhere to the Protection of Regulated and Riparian Trees environmental commitment to comply with the City's Tree Preservation Ordinance.

4. The combined implementation of the environmental commitment, and Mitigation Measures VEG-MM-2: Install Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species (p. 3.8-27), VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel (p. 3.8-27), VEG-MM-4: Retain a Biological Monitor (p. 3.8-28), and VEG-MM-6: Compensate for Loss of Protected Trees (p. 3.8-30) would reduce this effect to a less-than-significant level.

Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction

Findings: WSAFCA hereby makes findings (a)(1) as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. While there are no known occurrences of special-status plants in the project area, blooming-period surveys of the entire project area have not yet been conducted for special-status plant species. Because the presence and extent of any special-status plants in the project construction area are unknown, implementation of the project could result in their removal during construction.

2. This effect is significant due to the potential loss of special-status plants.

3. Implementation of Mitigation Measures VEG-MM-2: Install Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species (p. 3.8-27), VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel (p. 3.8-27), VEG-MM-4: Retain a Biological Monitor (p. 3.8-28), VEG-MM-7: Retain Qualified Botanists to Conduct Floristic Surveys for Special-Status Plants during Appropriate Identification Periods (p. 3.8-31), and VEG-MM-8: Avoid or Compensate for Substantial Effects on Special-Status Plants (p. 3.8-32) would reduce this effect to a less-than-significant level.

Effect FISH-1: Temporary Disturbance of Fish and Degradation of Habitat during Construction Activities

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Ground-disturbing activities during construction of the levee setback would increase the potential for erosion and discharge of fine sediment into the Sacramento River.
2. Erosion and discharge of fine sediment may cause injury or death of fish by disrupting normal behaviors and potentially increasing the susceptibility of some individuals to predation, which would be a significant effect.

3. The project would adhere to environmental commitments of a SWPPP and Turbidity Monitoring in Adjacent Water Bodies.

4. The combined implementation of environmental commitments and Mitigation Measure FISH-MM-1: Limit In-Water Construction Activity to Periods of the Year That Minimize Effects on Fish (p. 3.9-28) would reduce this effect to a less-than-significant level.

**Effect FISH-6: Fish Stranding in Offset Area Associated with Floodplain Inundation**

**Findings:** WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**

1. Following periods of floodplain inundation, receding floodwaters may collect in existing ponds, ditches, and other depressions, resulting in fish stranding and mortality due to lethal water temperatures, low dissolved oxygen, predation, and desiccation.

2. Because of the potential for stranding of Chinook salmon, steelhead, and other special-status fish species that may enter the floodway, this effect would be significant.

3. Implementation of Mitigation Measure FISH-MM-4: Develop and Implement a Drainage and Grading Plan that Minimizes Losses of Fish from Stranding (p. 3.9-33) would reduce this effect to a less-than-significant level.

**Effect WILD-1: Disturbance or Loss of VELBs and Their Habitat (Elderberry Shrubs)**

**Findings:** WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**

1. Implementation of the project would involve construction activities that would require the removal or disturbance of several elderberry shrubs.

2. This effect is significant because elderberry shrubs are host plant to the valley elderberry longhorn beetle (VELB), a species listed as threatened under the Federal Endangered Species Act (ESA), and project construction could result in take of VELB.

3. Implementation of Mitigation Measures VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel (p. 3.8-27), WILD-MM-1: Establish a Minimum 20-Foot-Wide Buffer around the Elderberry Shrub (p. 3.10-27), WILD-MM-2: Transplant Elderberry Shrubs That Cannot Be Avoided or Implement Dust Control Measures during Construction (p. 3.10-28), and WILD-MM-3: Compensate for Removal and Transplantation of VELB Habitat (p. 3.10-28) would reduce this effect to a less-than-significant level.

**Effect WILD-2: Disturbance or Loss of Western Pond Turtle and Their Habitat**

**Findings:** WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.
Facts Supporting the Findings:

1. Implementation of the project would include temporary disturbance to upland nesting or cover habitat and the potential for loss of individual pond turtles.

2. Potential effects on western pond turtle are significant because it is a species of special concern in California.

3. The project would adhere to the environmental commitment for the preparation of a SWPPP, a BSSCP, a SPCCP, and Turbidity Monitoring in Adjacent Water Bodies.

4. The combined implementation of environmental commitments and Mitigation Measures VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel (p. 3.8-27) and WILD-MM-4: Conduct a Preconstruction Survey for Western Pond Turtle and Exclude Turtles from Work Area (p. 3.10-29) would reduce this effect to a less-than-significant level.

Effect WILD-3: Disturbance or Loss of Giant Garter Snakes and Their Habitat during Construction

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Implementation of the project would result in the permanent loss of up to 2.24 acres of suitable upland habitat in the project area and would result in the temporary loss of up to 155 acres of suitable upland habitat in borrow site areas.

2. Potential effects on giant garter snake are significant because it is listed as threatened under ESA and the California Endangered Species Act (CESA).

3. The project would adhere to the environmental commitment for the preparation of a SWPPP, a BSSCP, a SPCCP, and Turbidity Monitoring in Adjacent Water Bodies.

4. The combined implementation of environmental commitments and Mitigation Measures VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel (p. 3.8-27), WILD-MM-5: Install and Maintain Construction Barrier Fencing around Suitable Giant Garter Snake Habitat (p. 3.10-31), WILD-MM-6: Minimize Potential Effects on Giant Garter Snakes during Construction in Suitable Habitat (p. 3.10-31), and WILD-MM-7: Compensate for Permanent Loss of Giant Garter Snake Habitat (p. 3.10-33) would reduce this effect to a less-than-significant effect.

Effect WILD-4: Loss of Swainson’s Hawk Foraging and Nesting Habitat

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Implementation of the project would result in the loss of 38 acres of Swainson’s hawk nesting habitat, the permanent loss of up to 194 acres of Swainson’s hawk foraging habitat, and the temporary loss of up to 80 acres of Swainson’s hawk foraging habitat. In addition, the project could potentially disturb active nests (if present) within the riparian areas due to construction noise.
2. Effects on Swainson’s hawk are significant because the hawk is listed as threatened under the CESA, and the project could result in a substantial decrease in the local population of Swainson’s hawks.

3. Implementation of Mitigation Measures VEG-MM-1: Compensate for the Loss of Woody Riparian Habitat (p. 3.8-26), VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel (p. 3.8-27), WILD-MM-8: Avoid Disturbance of Tree-, Shrub-, and Ground-Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors and Conduct Preconstruction Nesting Bird Surveys (p. 3.10-35), and WILD-MM-9: Compensate for Permanent Removal of Swainson’s Hawk Foraging Habitat (p. 3.10-36) would reduce this effect to a less-than-significant level.

Effect WILD-5: Disturbance or Loss of Western Burrowing Owls and Their Habitat

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Implementations of the project would result in the permanent loss of 194 acres of potential burrowing owl nesting and foraging habitat within the project area, the temporary loss of 80 acres of potential burrowing owl nesting and foraging habitat from construction, and up to 1,603 acres of potential habitat from borrow sites.

Effect WILD-6: Loss or Disturbance of Tree-, Shrub-, and Ground-Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Implementations of the project could result in the removal or disturbance (e.g., trimming) of trees and shrubs that provide potential nesting habitat for special-status birds and raptors during the nesting season (generally February 1 through August 31) and could remove or cause abandonment of active nests of special-status birds. The project would result in the conversion of grasslands that provide suitable nesting and foraging habitat for special-status birds.

2. Effects on nesting special-status birds are significant because these birds have special status under state and/or Federal laws.

3. Implementation of Mitigation Measures VEG-MM-1: Compensate for the Loss of Woody Riparian Habitat (p. 3.8-26), VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for
Effect WILD-7: Loss or Disturbance of Bats and Bat Roosts

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Construction activities associated with the implementation of the project, such as tree removal and trimming or construction noise, could result in destruction of active bat roosts, the loss of individuals, or roost failure. Nighttime construction activities could also disturb bats emerging from nearby roosts resulting in the disruption of foraging activities.
2. If bat species are present, these effects could be significant if the subsequent population decline was large and affected the viability of the local populations of bats. The California Department of Fish and Wildlife (DFW) considers bat roosts of special-status species and non-special-status species a sensitive resource.
3. Implementation of Mitigation Measures VEG-MM-1: Compensate for the Loss of Woody Riparian Habitat (p. 3.8-26), VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel (p. 3.8-27) and WILD-MM-8: Avoid Disturbance of Tree-, Shrub-, and Ground-Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors and Conduct Preconstruction Nesting Bird Surveys (p. 3.10-35) would reduce this effect to a less-than-significant level.

Effect UTL-1: Potential Temporary Disruption of Domestic Water Supply and Irrigation/Drainage Facilities due to Project Construction

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Implementation of the project would require modifications to domestic water supply, irrigation, and drainage infrastructure. Construction could result in the need to temporarily take individual water supply and drainage infrastructure elements out of service for short periods, anticipated to last no longer than 4 hours at a time.
2. Because the potential exists for damage to cause delay in provisions of water supply and drainage infrastructure elements, this effect is significant.
3. Implementation of Mitigation Measure UTL-MM-1: Coordinate with Water Supply Users before and during All Water Supply Infrastructure Modifications and Implement Measures to Minimize Interruptions of Supply (p. 3.15-9) would reduce this effect to a less-than-significant level.

Effect UTL-2: Decrease in Domestic and Irrigation Water Supply

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.
Facts Supporting the Findings:

1. Implementation of the project, particularly the construction of slurry cutoff walls, would likely result in a combination of lower static and pumping groundwater levels on the landside of the cutoff walls during most periods.

2. This effect is significant because some wells could experience reduced pumping capacities due to a combination of lower static water levels and increased drawdown, which could increase pumping costs for some well owners.

3. Implementation of Mitigation Measure UTL-MM-2: Restore Affected Domestic and Irrigation Water Service to Pre-project Conditions (p. 3.15-11) would reduce this effect to a less-than-significant level.

Effect UTL-3: Damage of Public Utility Infrastructure and Disruption of Service as a Result of Project Construction

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Implementation of the project could necessitate the relocation of utility infrastructure, which could result in temporary loss of service.

2. This effect is significant because the potential exists for damage and service interruptions to existing utilities.

3. Implementation of Mitigation Measure UTL-MM-3: Verify Utility Locations, Coordinate with Utility Providers, Prepare a Response Plan, and Conduct Worker Training (p. 3.15-12) would reduce this effect to a less-than-significant level.

Effect HAZ-5: Accidental Release of Hazardous Materials into the Environment during Project Construction or Operation

Findings: WSAFCA hereby makes finding (a)(1), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Ground disturbing activities or project design interfering with pipeline maintenance necessary to protect public safety could accidentally cause a rupture in these pipelines, resulting in the release of petroleum or wastewater into the surrounding area.

2. This effect is significant because the release of petroleum or wastewater would result in soil and groundwater contamination and could have a direct adverse effect on public health.

3. Implementation of Mitigation Measure HAZ-MM-1: Coordinate and Implement Pipeline Avoidance and Protection Measures (p. 3.16-9) would reduce this effect to a less-than-significant level.
Findings of Fact

Findings Regarding Infeasible Mitigation Measures (State CEQA Guidelines Section 15091[a][3])

WSAFCA, having reviewed and considered the information contained in the FEIR, and in accordance with PRC Section 21081 and State CEQA Guidelines Section 15091 (a)(3), makes the following findings regarding the significant and unavoidable effects of the Southport project. The FEIR identifies mitigation measures that could reduce the severity of significant effects. However, implementation of these mitigation measures cannot be assured to reduce the severity of significant effects to below a level of significance because the degree of future impacts and the feasibility and success of future mitigation measures cannot be adequately known.

These findings are appropriate because there are no feasible mitigation measures available that would reduce the identified effects to below a level of significance. "Feasible" is defined in Section 15364 of the State CEQA Guidelines to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." Section 15019(a)(3) of the State CEQA Guidelines also provide that "other" considerations may form the basis for a finding of infeasibility.

Effect AIR-2: Violate Any Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation—CEQA

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. The project’s estimated construction-related emissions would exceed the Sacramento Air Quality Management District’s (SMAQMD’s) and Bay Area Air Quality Management District’s (BAAQMD’s) NOX thresholds, as well as Yolo Solano Air Quality Management District’s (YSAQMD’s) NOX and particulate matter 10 microns in diameter or less (PM10) thresholds.

2. The effect as a result of construction emissions would be significant because it results in unmitigated emissions that exceed designated thresholds for NOX and PM10.

3. Implementation of Mitigation Measures AIR-MM-1: Implement Measures to Reduce Exhaust Emissions of NOX and PM10 (p. 3.5-21), AIR-MM-2: Implement Fugitive Dust Control Plan (p. 3.5-23), AIR-MM-3: Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents (p. 3.5-23), AIR-MM-4: Mitigate and Offset Construction-Generated NOX Emissions to Net Zero (0) for Emissions in Excess of General Conformity de Minimis Threshold (Where Applicable) and to Quantities below Applicable YSAQMD and SMAQMD CEQA Thresholds (p. 3.5-24), and AIR-MM-5: Mitigate and Offset Construction-Generated NOX Emissions to Quantities below Applicable BAAQMD CEQA Thresholds (p. 3.5-26), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet Federal Emergency Management Agency’s (FEMA’s) minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the
adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on air quality.

**Effect AIR-4: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region is a Non-Attainment Area under NAAQS and CAAQS**

**Findings:** WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**

1. The project’s construction-related emissions would result in a significant cumulative impact for NO\(_X\) in the SMAQMD and BAAQMD, and NO\(_X\) and PM10 in the YSAQMD.

2. Implementation of Mitigation Measures AIR-MM-1: Implement Measures to Reduce Exhaust Emissions of NO\(_X\) and PM10 (p. 3.5-21), AIR-MM-2: Implement Fugitive Dust Control Plan (p. 3.5-23), and AIR-MM-3: Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents (p. 3.5-23), would reduce NO\(_X\) emissions in the YSAQMD, BAAQMD, and SMAQMD to a less-than-significant level. However, PM10 emissions in YSAQMD would still exceed applicable air district thresholds even after implementation of Mitigation Measures AIR-MM-1 through AIR-MM-3. Mitigation Measures AIR-MM-4: Mitigate and Offset Construction-Generated NO\(_X\) Emissions to Net Zero (0) for Emissions in Excess of General Conformity de Minimis Threshold (Where Applicable) and to Quantities below Applicable YSAQMD and SMAQMD CEQA Thresholds (p. 3.5-24) and AIR-MM-5: Mitigate and Offset Construction-Generated NO\(_X\) Emissions to Quantities below Applicable BAAQMD CEQA Thresholds (p. 3.5-26), would further reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

3. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on air quality.

**Effect NOI-1: Exposure of Sensitive Receptors to Temporary Construction-Related Noise**

**Findings:** WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**

1. Implementation of the project would include construction-related activities that could exceed both West Sacramento and Sacramento daytime and nighttime noise ordinance standards.

2. Exceedance of the West Sacramento and Sacramento noise ordinance standards is considered a significant effect.
3. Implementation of Mitigation Measure NOI-MM-1: Employ Noise-Reducing Construction Practices (p. 3.7-18), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA's minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on noise.

**Effect NOI-2: Exposure of Sensitive Receptors to Temporary Construction-Related Vibration**

**Findings:** WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**

1. Implementation of the project would include construction-related vibration from highly dynamic equipment.

2. It is anticipated that construction equipment would not typically operate within approximately 30 feet of residences and structures. However, there may be situations in which this would be required, directly exposing residences and other structures to ground vibration in excess of 0.2 inch/second. This effect would be significant.

3. Implementation of Mitigation Measure NOI-MM-2: Employ Vibration-Reducing Construction Practices (p. 3.7-19), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on noise.

**Effect VEG-1: Disturbance or Removal of Riparian Trees in Compliance with the USACE Levee Vegetation Policy**

**Findings:** WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.
Facts Supporting the Findings:

1. Implementation of the project would require substantial disturbance and removal of riparian habitat in order to construct flood risk-reduction measures, which would be a significant effect.

2. The project would adhere to the Protection of Regulated and Riparian Trees environmental commitment for compliance with the City’s Tree Preservation Ordinance.

3. The combined implementation of the environmental commitment, and Mitigation Measures VEG-MM-1: Compensate for the Loss of Woody Riparian Habitat (p. 3.8-26), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on vegetation and wetlands.

Effect FISH-3: Loss or Degradation of Riparian and SRA Cover Associated with Levee Construction

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Implementation of the project would require the substantial removal of existing riparian vegetation and shaded riverine aquatic habitat (SRA) cover.

2. The substantial loss of SRA cover could indirectly affect the health and survival of juvenile fish and aquatic species, which would be a significant effect on fish and aquatic species.

3. Implementation of Mitigation Measures FISH-MM-2: Implement Onsite and Offsite Compensation Measures to Replace Riparian and SRA Cover Losses (p. 3.9-29) and FISH-MM-3: Incorporate Riparian and Wetland Vegetation in the Design of the Levee Breaches (p. 3.9-32), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in...
Further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on fish and aquatic species.

Effect LU-3: Loss of Important Farmland and Agricultural Production Value

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Implementation of the project would result in the conversion of prime farmland to non-agricultural uses as a result of the construction of flood risk-reduction measures.

2. Although conversion of a portion of the project area has been previously planned for by the City in the Southport Framework Plan, the project would substantially increase the amount of prime farmland in the construction area that would be converted to non-agricultural uses and no longer available for agricultural production, which would be a significant effect.

3. Implementation of Mitigation Measures GEO-MM-1: Implement the Reclamation Actions of a Project-Specific Reclamation Plan (p. 3.3-13), LU-MM-1: Provide Compensatory Agricultural Land Protection (p. 3.11-9), and LU-MM-2: Avoid Important Farmland in Borrow Areas (3.11-9), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on land use and agriculture.

Effect VIS-1: Result in Temporary Visual Effects from Construction

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Construction of the project would likely occur over multiple years and would involve both daytime and nighttime construction activities. The project would also result in the displacement of agricultural fields, residences, and small businesses, and the construction of borrow pits and flood risk-reduction measures.

2. The construction’s proximity to residential viewers who are highly sensitive and the displacement of residents would result in significant effects on visual resources.
3. Implementation of Mitigation Measures VIS-MM-1: Use Native Wildflower Species in Erosion Control Grassland Seed Mix (p. 3.13-12), VIS-MM-2: Develop a Soil Borrow Strategy and Site Reclamation Plan (p. 3.13-12), and VIS-MM-3: Limit Construction near Residences to Daylight Hours (p. 3.13-13), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on visual resources.

Effect CUL-1: Effects on Architectural (Built Environment) Resources (the Sacramento River Levee)

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Implementation of the project would involve demolishing or substantially altering the physical characteristics of the levee or cause a major change to its engineering design or overall setting, which would be a significant effect.

2. Implementation of Mitigation Measure CUL-MM-1: Detailed Recordation of the Affected Levee (p. 3.17-16), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

3. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on cultural resources.

Effect CUL-2: Change in the Significance of an Archaeological Resource

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:
1. Implementation of the project includes the possibility that construction would unearth archaeological materials from beneath the ground surface that cannot currently be identified
because of limited access and because of the infeasibility of identifying all buried resources prior to construction.

2. Damage to archaeological resources, if they meet the significance criteria of the National Register of Historic Places (NRHP) and/or the California Register of Historic Resources (CRHR), would be a significant effect.

3. Implementation of Mitigation Measures CUL-MM-2: Complete Archaeological Inventory and Evaluation prior to Construction and Implement Treatment or Preservation for Eligible and Adversely Affected Resources (p. 3.17-17) and CUL-MM-3: Implement Inadvertent Discovery Procedures (p. 3.17-18), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on cultural resources.

**Effect CUL-3: Disturbance of Native American and Historic-Period Human Remains**

**Findings:** WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**

1. The project has the potential for buried human remains to be unearthed and disturbed during ground-disturbing activities that would be associated with construction in the study area is considered high, and the disturbance of any human remains is considered a significant effect.

2. Implementation of Mitigation Measure CUL-MM-4: Implement Human Remains Discovery Procedures (p. 3.17-18), would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

3. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on cultural resources.
Effect CUL-4: Disturbance of Native American and Historic-Period Human Remains

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. The excavation of borrow material during project construction has the potential to damage archaeological resources, human remains, and historic-era structures that potentially occur in the borrow areas. Damage to these resources would be a significant effect.

2. Implementation of Mitigation Measure CUL-MM-5: Implement Cultural Resource Management Protocols for Borrow Areas (p. 3.17-21) would reduce the severity of this effect, but not to a less-than-significant level. This effect would remain significant and unavoidable.

3. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented and the levees surrounding the city would continue to require modification to meet FEMA's minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable effect on cultural resources.

Significant Cumulative Effects

Transportation and Navigation

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Construction activities associated with the project would result in a temporary increase in traffic volumes on the haul routes and would result in short-term lane and road closures on roads in and adjacent to the project sites, which would have the potential to increase road hazards, disrupt the alternative transportation on the affected roads, and degrade the operation of haul routes and the roads accessed or used for detours during construction.

2. Although it is difficult to determine when major infrastructure projects would be constructed, combined with other projects in West Sacramento, there could be significant cumulative effects on transportation if the Southport project and other projects are implemented concurrently or sequentially. Specifically, cumulative effects would occur if projects use the same haul routes identified for the Southport project and currently operating at unacceptable level of service (LOS) E.

3. It is expected that projects generating construction-related traffic would also minimize transportation effects through implementation of minimization measures; however, there could still be a significant and unavoidable cumulative effect.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this
effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable cumulative effect on transportation.

**Air Quality and Climate Change**

**Findings:** WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**

1. Construction activities associated with the project would result in temporary construction-related emissions, particularly related to NOₓ, PM10, and greenhouse gas (GHG) emissions.

2. Although it is difficult to determine when major infrastructure projects would be constructed, combined with other projects occurring in the YSAQMD, SMAQMD, and BAAQMD, there could be significant cumulative effects on air quality if the Southport project and other projects are implemented concurrently or sequentially.

3. It is expected that projects generating these pollutants also would minimize emissions through dust control and exhaust emissions control. However, there still could be a significant cumulative effect on air quality and GHG emissions.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable cumulative effect on air quality and climate change.

**Land Use and Agriculture**

**Findings:** WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**

1. The Southport project would result in the conversion of some land use types and farmland, particularly prime farmland, to levees due to the construction of proposed flood risk-reduction measures.

2. Overall, the land use designation changes would be negligible, as the new land use would be public/quasi-public. However, conversion of agricultural land in Yolo County is a primary
Findings of Fact

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concern related to land use, and it is a significant cumulative effect because it is an irretrievable loss of a finite resource. Although the project would be constructed largely in areas that were identified for future conversion from agricultural uses, a small portion of the project area that was proposed for continued agricultural use would be converted at the southern end of the construction area, which would contribute to the cumulative conversion of farmlands.

3. The implementation of project-specific mitigation measures would reduce the project’s contribution to this cumulative effect. However, when combined with the cumulative conversion of farmland related to other projects in the region, the Southport project results in a significant cumulative effect.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable cumulative effect on land use and agriculture.

Findings Regarding Alternatives (State CEQA Section 15091[a][3])

Because the Southport project would cause one or more unavoidable significant environmental effect, WSAFCA must make findings with respect to the alternatives to the project considered in the FEIR, evaluating whether these alternatives could feasibly avoid or substantially lessen the unavoidable significant effects while achieving most of the project’s goals and objectives (listed in Section 1.3.2 of the FEIR [Volume I]).

WSAFCA, having reviewed and considered the information contained in the FEIR and in accordance with PRC Section 21081 and State CEQA Guidelines Section 15091(a)(3), finds no alternative is both feasible and environmentally superior with respect to the unavoidable significant impacts identified in the FEIR. WSAFCA makes the following specific findings with respect to the alternatives identified in the FEIR.

Effect TRA-1: Temporary Increase in Traffic Volumes from Construction-Generated Traffic

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Implementation of the project would generate numerous vehicles trips along haul routes in West Sacramento, several of which currently have an unacceptable LOS.

2. The increase in vehicle trips would increase traffic volumes, which would result in a significant effect on traffic operation on project haul routes.

3. WSAFCA is committed to implementing the Traffic Control and Road Maintenance Plan environmental commitment to reduce the effects of construction traffic on all haul routes;
however, the construction traffic effects would be temporarily significant and unavoidable. There are no feasible mitigation measures or combination of feasible mitigation measures that would avoid temporary increases in traffic volumes.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modifications to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also resulted in significant and unavoidable effects on traffic volumes.

Effect LU-2: Change in Land Use Designations or Potential to Conflict with Local Land Use Designations as a Result of Construction

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Implementation of the project would require permanent right-of-way acquisition, which would conflict with existing park, residential, and mixed use land use designations under the Southport Framework Plan.

2. There is a finite amount of land available within the boundaries of the Southport Framework Plan. Occupying a portion of the land identified for park, residential, and mixed use with the Southport project would eliminate the potential for this land to be put to its planned uses and would be considered a significant effect on land use.

3. There are no feasible mitigation measures or combination of feasible mitigation measures that would avoid conflicts with existing land use designations or avoid a reduction in the capacity to accommodate future development in portions of the project area. This effect is significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modifications to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also resulted in significant and unavoidable effects related to land use designation conflicts and a reduction in the capacity to accommodate future development in portions of the project area.
Effect VIS-2: Adversely Affect a Scenic Vista

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Implementation of the project would require the removal of riparian vegetation along the Sacramento River that is part of scenic vistas and would introduce a large mass that would block views of the waterways and surrounding landscape.

2. Removal of vegetation that is part of a scenic vista and the introduction of a large mass that blocks views would result in a significant effect on visual quality.

3. There are no feasible mitigation measures or combination of feasible mitigation measures that would avoid effects to scenic vistas and reduce the significance of this effect while still achieving the project’s goals and objectives. This effect is significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also resulted in significant and unavoidable visual effects as a result of adversely affecting a scenic vista.

Effect VIS-3: Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings

Findings: WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

Facts Supporting the Findings:

1. Implementation of the project would replace views of residences, businesses, agricultural fields, and vegetation with views of levees, seepage berms, and borrow areas.

2. This effect would be significant because of the degradation of the existing visual character and visual quality of the project area.

3. There are no feasible mitigation measures or combination of feasible mitigation measures that would prevent the degradation of the existing visual character or quality of the site and reduce the significance of this effect while still achieving the project’s goals and objectives. This effect is significant and unavoidable.

4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet the FEMA’s minimum acceptable level of performance. In addition, the associated risk to
human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also resulted in significant and unavoidable visual effects as a result of the degradation of the existing visual character or quality of the project site.

**Effect VIS-4: Create a New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Public Views**

**Findings:** WSAFCA hereby makes finding and (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**
1. Implementation of the project would introduce a large surface of grass and rock that would increase glare for all viewer groups because there no longer would be trees and shrubs to help absorb sunlight and provide shade. There would be a similar effect on soil borrow sites if trees and shrubs were removed.
2. An increase in light or glare is a significant effect because viewer groups would have direct views of the new sources of light or glare.
3. There are no feasible mitigation measures or combination of feasible mitigation measures that would block light or glare and reduce the significance of this effect while still achieving the project's goals and objectives. This effect is significant and unavoidable.
4. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA's minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also resulted in significant and unavoidable visual effects as a result of a new source of light or glare.

**Significant Cumulative Effects**

**Geology, Seismicity, Soils, and Mineral Resources**

**Findings:** WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**
1. Implementation of the Southport project would require the extraction of large amounts of borrow material from agricultural lands in the area.
2. The potential loss of soil productivity due to borrow of soil materials, and implications for future land use of borrow areas, are unknown. Any loss of soil productivity contributes to the long-term cumulative decline in the extent and conditions of soil resources in the Central Valley of California and would be considered a significant cumulative effect.
2. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable cumulative effect on geology, seismicity, soils, and mineral resources.

**Visual Resources**

**Findings:** WSAFCA hereby makes finding (a)(3), as stated in State CEQA Guidelines Section 15091 and as required by PRC Section 21081, with respect to the above-identified effect.

**Facts Supporting the Findings:**

1. The Southport project would require that levee slopes be maintained free of woody vegetation in perpetuity. Maintaining the levees devoid of the characteristic riparian vegetation and mature landscaping and replacing it with grass and potentially rock would highly degrade the visual character and quality of the area and increase glare.

2. Other projects in the area would combine to slowly transform the vegetated waterways to channel-like water conveyance ways. This would lead to the eventual denuding of the waterway and be a severe cumulative effect on the visual environment. This cumulative effect, therefore, is significant.

3. WSAFCA considered five other alternatives in the DEIR: the No Action Alternative and Alternative 1 through Alternative 4, none of which would feasibly reduce the severity of this effect. Under the No Action Alternative, no flood risk-reduction measures would be implemented, and the levees surrounding the city would continue to require modification to meet FEMA’s minimum acceptable level of performance. In addition, the associated risk to human health and safety, property, and the adverse economic impact that serious flood could cause would continue, and the risk of a catastrophic flood would remain high, as described in further detail in Chapter 2, Section 2.3.2 of the FEIR (Volume I). Alternative 1 through Alternative 4 also would contribute to a significant and unavoidable cumulative effect on visual resources.
Chapter 3

Statement of Overriding Considerations

CEQA Requirements

CEQA prohibits an agency from approving a project that will have significant, unavoidable environmental impacts unless the agency adopts a statement describing the specific benefits provided by the project that will outweigh its expected unavoidable impacts. If the project’s specific economic, legal, social, technological, or other benefits outweigh the unavoidable adverse environmental effects, those effects may be considered acceptable, notwithstanding the fact that they cannot be avoided. This “statement of overriding considerations” must be supported by substantial evidence (State CEQA Guidelines Section 15093).

WSAFCA recognizes that despite full implementation of the environmental commitments and mitigation measures, the Southport project would have significant, unavoidable impacts on the environment, as addressed in the FEIR. These effects are listed below.

- Effect TRA-1: Temporary Increase in Traffic Volumes from Construction-Generated Traffic
- Effect AIR-2: Violate Any Air Quality Standard or Substantial Contribution to Existing or Projected Air Quality Violation—CEQA
- Effect AIR-4: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region is a Non-Attainment Area under NAAQS and CAAQS
- Effect NOI-1: Exposure of Sensitive Receptors to Temporary Construction-Related Noise
- Effect VEG-1: Disturbance or Removal of Riparian Habitat as a Result of Project Construction
- Effect FISH-3: Loss or Degradation of Riparian and SRA Cover Associated with Levee Construction
- Effect LU-2: Change in Land Use Designations or Potential to Conflict with Local Land Use Designations as a Result of Construction
- Effect LU-3: Loss of Important Farmland and Agricultural Production Value
- Effect EJSOC-2: Temporary or Permanent Displacement of Residents due to Project Construction
- Effect VIS-1: Result in Temporary Visual Effects from Construction
- Effect VIS-2: Adversely Affect a Scenic Vista
- Effect VIS-3: Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings
- Effect VIS-4: Create a New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Public Views
- Effect CUL-1: Effects on Architectural (Built Environment) Resources (the Sacramento River Levee)
Statement of Overriding Considerations

- Effect CUL-2: Change in the Significance of an Archaeological Resource
- Effect CUL-3: Disturbance of Native American and Historic-Period Human Remains
- Effect CUL-4: Effects on Cultural Resources Associated with Excavation of Borrow Material
- Cumulative Effects on Geology, Seismicity, Soils, and Mineral Resources
- Cumulative Effects on Transportation and Navigation
- Cumulative Effects on Air Quality
- Cumulative Effects on Land Use and Agriculture
- Cumulative Effects on Visual Resources

**Overriding Considerations**

As required by the State CEQA Guidelines Section 15093, WSAFCA finds that the unavoidable significant effects listed above are outweighed by the public safety improvements and environmental benefits offered by the Southport project. As described in detail in Section 1.3, Project Purpose, Objectives, and Need (Volume I) of the FEIR and summarized below, WSAFCA finds the project would safeguard public health and safety by providing significant, urgently needed flood risk reduction benefits. The project would also significantly improve the local ecosystem, providing long-term benefits to special-status species and other vegetation and wildlife.

**Reduce Risk of Harm to Life and Property in West Sacramento**

Study results supporting the comprehensive West Sacramento Levee Evaluation Project, completed in 2008, have shown that the levees protecting the city, and specifically those in Southport, need improvements to reduce the current elevated level of risk to human health and safety, property, and the adverse environmental and economic effects that serious flooding would cause. Some of the key infrastructure and facilities in West Sacramento that are at risk of flooding and will benefit from the Southport project are listed in Table 1.

Implementation of the project will address known deficiencies along the Southport reach as observed during high-flow events in the Sacramento River, including waterside erosion, geometry, through-seepage, and under-seepage (also discussed in Section 1.2, Setting and Study Area [Volume II]). Correction of these deficiencies through project implementation will substantially reduce the risk of injury, death, and property and other economic damage that could be caused by a catastrophic flood in WSFACA’s planning area.

**Contribute to Achievement of the State-Mandated Minimum 200-Year Level of Flood Protection**

Implementation of the project will reduce flood risk toward a state-mandated target of 200-year protection from Sacramento River flows for the Southport reach from the Sacramento River Bank Protection Project to the South Cross Levee (southern city limit), in compliance with State Senate Bill (SB) 5 mandates for 200-year protection for urbanized areas.
Contribute to Achievement of FEMA’s Minimum 100-Year Level of Levee Performance

Improvements are necessary to meet FEMA’s minimum acceptable level of performance (commonly referred to as the 100-year flood) as specified by the National Flood Insurance Program (NFIP) (HDR 2008). FEMA’s flood risk maps are being revised nationwide under a program called RiskMAP (mapping, assessment, and planning). The project would incrementally reduce risk to meet or exceed the FEMA standards.

Preserve, Restore, and Enhance Wildlife Habitat within the Project Area

The project will provide ecosystem and habitat restoration, as well as preserving and enhancing riparian and other native habitats, where compatible with construction, operation, and maintenance of flood risk-reduction infrastructure, and consistent with the City of West Sacramento Parks Master Plan (Parks Master Plan) and Bicycle and Pedestrian Master Plan. While construction activities will result in the significant and unavoidable effects listed above, the project’s long-term operation of approximately 120 acres of mature riparian and riparian-adjacent habitat along the mainstem of the Sacramento River, provides a vast environmental benefit unparalleled in the region.
Table 1. Key Infrastructure and Facilities in West Sacramento

<table>
<thead>
<tr>
<th>Linear Transportation Facilities</th>
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<tbody>
<tr>
<td>Interstate 80</td>
<td>Union Pacific Railroad</td>
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<td>U.S. Highway 50</td>
<td>Sierra Pacific Railroad</td>
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<td>State Route 84</td>
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<tr>
<th>Water Supply and Treatment Facilities</th>
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<tr>
<td>Water Treatment Plant</td>
<td>In-Line Booster Pump Station</td>
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<tr>
<td>Central Tank</td>
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<td>Oak Street</td>
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<tr>
<td>Bridgeway Lakes II Tank</td>
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<td>Bryte Bend</td>
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<tr>
<th>Sewer Collection Facilities (Pump Stations)</th>
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<tr>
<td>Bryte</td>
<td>Jefferson</td>
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<tr>
<td>Northport</td>
<td>Industrial</td>
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<td>South</td>
<td>Southport</td>
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<td>Coke</td>
<td>Triangle</td>
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<td>Largo</td>
<td>Bridgeway Island</td>
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<td>Allen</td>
<td>Parlin</td>
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<td>Sacramento Regional County Sanitation District – Lower Northwest Interceptor</td>
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<th>Storm System Facilities (Pump Stations)</th>
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<tr>
<td>5th Street</td>
<td>Deerwood</td>
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<tr>
<td>Harbor</td>
<td>Lighthouse</td>
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<tr>
<td>Raley's</td>
<td>Riske Lane</td>
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<tr>
<td>Washington</td>
<td>Jefferson</td>
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<tr>
<th>Government and Quasi-Government Facilities</th>
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<tr>
<td>U.S. Postal Service regional distribution center</td>
<td>California Highway Patrol (CHP) Academy</td>
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<tr>
<td>Port of West Sacramento</td>
<td>California State Library archive warehouse</td>
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<tr>
<td>City of West Sacramento City Hall</td>
<td>City of West Sacramento Police Station and Service Center</td>
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<tr>
<td>Fire Administration Office and Fire Stations</td>
<td>Public Works Corporation Yard</td>
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<td>Washington Unified School District Facilities</td>
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<th>Petroleum and Agricultural Product Manufacture, Storage, and Distribution</th>
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<tr>
<td>Shell Equilon</td>
<td>BP/Arco</td>
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<td>Kinder Morgan</td>
<td>Ramos Fuel</td>
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<td>Agríum</td>
<td>Valley Slurry Seal</td>
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<td>Chevron</td>
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<tr>
<th>Building Material Manufacture and Distribution</th>
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<tr>
<td>Clark Pacific</td>
<td>Two Rivers Cement LLC</td>
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<tr>
<th>Administrative Offices</th>
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<tr>
<td>California Department of Water Resources</td>
<td>Raley's Grocery Stores headquarters</td>
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<tr>
<td>California Department of General Services</td>
<td>California State Teachers’ Retirement System</td>
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<tr>
<td>Coventry Healthcare</td>
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<th>Other Important Commercial Facilities</th>
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<tr>
<td>Raley’s Bakery</td>
<td>McKesson Drug Distribution Center</td>
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<tr>
<td>Greyhound maintenance facility</td>
<td>AT&amp;Torporation yard</td>
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<tr>
<td>United Parcel Service regional distribution center</td>
<td>Pacific Gas &amp; Electric printing facility</td>
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<tr>
<td>Siemens</td>
<td>Hunter Douglas/Bytheways Inc.</td>
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<td>Farmer’s Rice Cooperative</td>
<td>Xyratex International</td>
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<td>KOVR Channel 13/Channel 31</td>
<td>Flowmaster</td>
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<td>Tony’s Fine Foods</td>
<td>Nor-Cal Beverage</td>
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<tr>
<th>Sports and Entertainment Facility (and disaster recovery center)</th>
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<tr>
<td>Raley Field</td>
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There is a need to provide West Sacramento residents with recreation elements that are compatible with implementation of flood risk-reduction measures. The City's planned recreation and open space and goals presently are unmet, and flood risk-reduction elements typically underlie or are adjacent to proposed recreation elements that are part of the City's planning documents. Surrounding waterways not only are an element of flood risk but also provide opportunity for water-oriented recreation and public open space. The project would provide improved or new public outdoor recreation and open space opportunities, where compatible with construction, operation, and maintenance of flood risk-reduction infrastructure, and consistent with the Parks Master Plan and the Bicycle and Pedestrian Master Plan.

The project would be constructed as soon as possible to reduce flood risk as quickly as possible.

The project would be politically, socially, economically, and environmentally acceptable.

The project would facilitate compatibility with the Central Valley Flood Protection Plan and West Sacramento General Reevaluation Report such that proposed activities would be “no regrets” and not inconsistent with any future plans.

WSAFCA finds that the above-referenced benefits outweigh the Southport project's significant and unavoidable environmental effects. Therefore, WSAFCA has adopted these Findings and Statement.
Chapter 4
References

City of West Sacramento Parks and Community Services Department. 1995. *West Sacramento Bicycle and Pedestrian Path Master Plan Addendum*. West Sacramento, CA.


## Mitigation Monitoring and Reporting Program for the West Sacramento Levee Improvements Program

### Southport Sacramento River Early Implementation Project

#### Mitigation Monitoring and Reporting Program

<table>
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<tr>
<th>Description of Measure</th>
<th>Implementation Schedule</th>
<th>Party Responsible for Implementation/ Verification</th>
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<td>Protection of Regulated and Riparian Trees</td>
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<td>Stormwater Pollution Prevention Plan</td>
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<tr>
<td>Bentonite Slurry Spill Contingency Plan (Frac-Out Plan)</td>
<td>Prior to construction</td>
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<td>Spill Prevention, Control, and Countermeasure Plan</td>
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<td>Soil Hazards Testing and Soil Disposal Plan</td>
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<td>WSAFCA, in coordination with its contractor</td>
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<td>Giant Garter Snake and Its Habitat Effects Minimization</td>
<td>Prior to and during construction</td>
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<td>Roadway Noise and Light Reduction</td>
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<td>Mosquito and Vector Control Management Plan</td>
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<td>WSAFCA, in coordination with its contractor and the Sacramento-Yolo Mosquito and Vector Control District</td>
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<td>Aquatic Invasive Species Prevention</td>
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<td>Construction-Related Damage Assessment</td>
<td>Prior to, during, and after construction</td>
<td>WSAFCA, in coordination with its contractor</td>
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### Flood Risk Management and Geomorphic Conditions

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<tr>
<td>FR-MM-1: Coordinate with Owners and Operators, Prepare Drainage Studies as Needed, and Remediate Effects through Project Design</td>
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<td>FR-MM-2: Monitor Depositional Feature Integrity and Stability Postconstruction, and Remediate Effects through Restoration Activities</td>
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<td><strong>Water Quality and Groundwater Resources</strong></td>
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<td>WQ-MM-1: Implement Provisions for Dewatering</td>
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<td>GEO-MM-1: Implement the Reclamation Actions of a Project-Specific Reclamation Plan</td>
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<td><strong>Air Quality</strong></td>
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<td>AIR-MM-1: Implement Measures to Reduce Exhaust Emissions of NOx and PM10</td>
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<td>AIR-MM-2: Implement Fugitive Dust Control Plan</td>
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<tr>
<td>AIR-MM-3: Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents</td>
<td>Prior to and during construction</td>
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<td>AIR-MM-4: Mitigate and Offset Construction-Generated NOx Emissions to Net Zero (0) for Emissions in Excess of General Conformity de Minimis Threshold (Where Applicable) and to Quantities below Applicable YSAQMD and SMAQMD CEQA Thresholds</td>
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<td>AIR-MM-5: Mitigate and Offset Construction-Generated NOx Emissions to Quantities below Applicable BAAQMD CEQA Thresholds</td>
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<td>CC-MM-1: Implement Measures to Minimize GHG Emissions during Construction</td>
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<td>NOI-MM-1: Employ Noise-Reducing Construction Practices</td>
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<tr>
<td>NOI-MM-2: Employ Vibration-Reducing Construction Practices</td>
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<td>M.M. 4-8-1 from the Southport Framework Plan draft EIR.</td>
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**Vegetation and Wetlands**

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<td>VEG-MM-1: Compensate for the Loss of Woody Riparian Habitat</td>
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<tr>
<td>VEG-MM-2: Install Exclusion Fencing along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species</td>
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<td>VEG-MM-3: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel</td>
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<td>VEG-MM-4: Retain a Biological Monitor</td>
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<td>VEG-MM-5: Compensate for the Loss of Waters of the United States</td>
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<td>VEG-MM-6: Compensate for Loss of Protected Trees</td>
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<tr>
<td>VEG-MM-7: Retain Qualified Botanists to Conduct Floristic Surveys for Special-Status Plants during Appropriate Identification Periods</td>
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<td>VEG-MM-8: Avoid or Compensate for Substantial Effects on Special-Status Plants</td>
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**Fish and Aquatic Resources**

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<tr>
<td>FISH-MM-1: Limit In-Water Construction Activities to Periods of the Year that Minimize Effects on Fish</td>
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<td>FISH-MM-2: Implement Onsite and Offsite Compensation Measures to Replace Riparian and SRA Cover Losses</td>
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<td>FISH-MM-3: Incorporate Riparian and Wetland Vegetation in the Design of the Levee Breaches</td>
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<td>FISH-MM-4: Develop and Implement a Drainage and Grading Plan that Minimizes Losses of Fish from Stranding</td>
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<td>WILD-MM-1: Establish a Minimum 20-Foot-Wide Buffer around the Elderberry Shrub</td>
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<td>WILD-MM-2: Transplant Elderberry Shrubs That Cannot Be Avoided or Implement Dust Control Measures during Construction</td>
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<td>WILD-MM-3: Compensate for Removal and Transplantation of VELB Habitat</td>
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<td>WILD-MM-4: Conduct a Preconstruction Survey for Western Pond Turtle and Exclude Turtles from Work Area</td>
<td>Prior to construction</td>
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<tr>
<td>WILD-MM-5: Install and Maintain Construction Barrier Fencing around Suitable Giant Garter Snake Habitat</td>
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<td>WILD-MM-6: Minimize Potential Effects on Giant Garter Snakes during Construction in Suitable Habitat</td>
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<td>WILD-MM-7: Compensate for Permanent Loss of Giant Garter Snake Habitat</td>
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<tr>
<td>WILD-MM-8: Avoid Disturbance of Tree-, Shrub-, and Ground-Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors and Conduct Preconstruction Nesting Bird Surveys</td>
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<td>WILD-MM-9: Compensate for Permanent Removal of Swainson's Hawk Foraging Habitat</td>
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<td>WILD-MM-10: Conduct Preconstruction Surveys for Active Burrowing Owl Burrows and Implement the 2012 California Department of Fish and Game Guidelines for Burrowing Owl Mitigation, If Necessary</td>
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<td>WILD-MM-11: Coordinate with Resource Agencies and Develop an Appropriate Compensation Plan for Burrowing Owl</td>
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<td>WILD-MM-12: Conduct Preconstruction Surveys for Roosting Bats and Implement Protective Measure</td>
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<td>LU-MM-1: Provide Compensatory Agricultural Land Protection</td>
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<td>LU-MM-2: Avoid Important Farmland in Borrow Areas</td>
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<td><strong>Visual Resources</strong></td>
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<td>VIS-MM-1: Use Native Wildflower Species in Erosion Control Grassland Seed Mix</td>
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<td>VIS-MM-2: Develop a Soil Borrow Strategy and Site Reclamation Plan</td>
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<td>VIS-MM-3: Limit Construction near Residences to Daylight Hours</td>
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<td><strong>Utilities and Public Services</strong></td>
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<td>UTL-MM-1: Coordinate with Water Supply Users before and during All Water Supply Infrastructure Modifications and Implement Measures to Minimize Interruptions of Supply</td>
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<td>UTL-MM-2: Restore Affected Domestic and Irrigation Water Service to Pre-project Conditions</td>
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<td>CUL-MM-1: Detailed Recordation of the Affected Levee</td>
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<td>CUL-MM-2: Complete Archaeological Inventory and Evaluation prior to Construction and Implement Treatment or Preservation for Eligible and Adversely Affected Resources</td>
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<td>CUL-MM-4: Implement Human Remains Discovery Procedures</td>
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