Santa Clara Valley Water District
Capital Improvement Program Committee Meeting

District Headquarters, Board Conference Room A-124
5700 Almaden Expressway, San Jose, CA 95118

RESCHEDULED REGULAR MEETING
AMENDED/APPENDED AGENDA

Monday, November 18, 2019
10:00 AM

District Mission: Provide Silicon Valley safe, clean water for a healthy life, environment and economy.

Nai Hsueh, Chair, District 5
Linda J. LeZotte, Vice Chair, District 4

Tony Estremera, District 6

All public records relating to an item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarters Building, 5700 Almaden Expressway, San Jose, CA 95118, at the same time that the public records are distributed or made available to the legislative body. Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend Board of Directors' meeting. Please advise the Clerk of the Board Office of any special needs by calling (408) 265-2600.

BETH REDMOND
Committee Liaison

NATALIE F. DOMINGUEZ, CMC
Assistant Deputy Clerk II
Office/Clerk of the Board
(408) 265-2659
ndominguez@valleywater.org

Note: The finalized Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.

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Santa Clara Valley Water District
Capital Improvement Program Committee

RESCHEDULED REGULAR MEETING
AGENDA

Monday, November 18, 2019 **10:00 AM** **District Headquarters, Board Conference Room A-124**
5700 Almaden Expressway, San Jose, CA 95118

1. CALL TO ORDER:

1.1. Roll Call.

2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA.

Notice to the public: This item is reserved for persons desiring to address the Committee on any matter not on this agenda. Members of the public who wish to address the Committee on any item not listed on the agenda should complete a Speaker Form and present it to the Committee Clerk. The Committee Chair will call individuals in turn. Speakers comments should be limited to three minutes or as set by the Chair. The law does not permit Committee action on, or extended discussion of, any item not on the agenda except under special circumstances. If Committee action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Committee may take action on any item of business appearing on the posted agenda.

3. APPROVAL OF MINUTES:

3.1. Approval of October 21 and 24, 2019 Meeting Minutes. 19-1083

Recommendation: Approve the minutes.
Manager: Michele King, 408-630-2711
Attachments: Attachment 1: 102119 CIP Committee Minutes
Attachment 2: 102419 CIP Committee Minutes
Est. Staff Time: 5 Minutes

4. ACTION ITEMS:

4.1. Update on the Palo Alto Flood Basin Tide Gate Structure Improvements Project, Project No. 10394001, (City of Palo Alto, District 7). 19-0805

Recommendation: Receive the Update on the Palo Alto Flood Basin Tide Gate Structure Improvements Project.

Manager: Ngoc Nguyen, 408-630-2632

Attachments: Attachment 1: Map
Attachment 2: Alternative B Construction Staging
Attachment 3: Alternative C Construction Staging
Attachment 4: Feasible Alternatives Matrix
Attachment 5: Presentation

Est. Staff Time: 10 Minutes

4.2. Capital Project Monitoring - Construction. 19-1081

Recommendation: Receive and discuss information regarding the status of capital projects in the construction phase.

Manager: Tim Bramer, 408-630-3794
Ngoc Nguyen, 408-630-2632
Michael Cook, 408-630-2424

Attachments: Attachment 1: Capital Project Monitoring Report - Construction.pd

Est. Staff Time: 15 Minutes

4.3. Amendment to Consultant Agreement A3933A with Harris and Associates to Provide additional $350,000 for Construction Management Services for the Permanente Creek Flood Protection Project - McKelvey Park Detention Basin (Project No. 26244001) (Mountain View) (District 7) 19-1077

Recommendation: Receive information on upcoming Amendment to Consultant Agreement A3933A with Harris and Associates for Construction Management Services for the Permanente Flood Protection Project - McKelvey Park Detention Basin that staff will be recommending for Board approval.

Manager: Ngoc Nguyen, 408-630-2632

Est. Staff Time: 5 Minutes

*4.4. Safe, Clean Water and Natural Flood Protection Program Flood Protection Projects Funding Scenario Discussion. 19-1082

Recommendation:
A. Receive project updates on the following Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) Flood Protection Projects:
   a. Coyote Creek
   b. Upper Penitencia Creek
   c. Upper Llagas Creek
   d. Upper Guadalupe River
B. Review potential funding scenarios, provide feedback as necessary; and
C. Determine recommendation to full Board.

Manager: Melanie Richardson, 408-630-2035
Nina Hawk, 408-630-2736

Attachments:
Attachment 1: Coyote Creek Update
Attachment 2: Upper Penitencia Creek Update
Attachment 3: Upper Llagas Creek Update
Attachment 4: Upper Guadalupe River Update
Attachment 5: Potential Funding Scenarios
*Supplemental Committee Agenda Memo
*Supplemental Attachment 1

Est. Staff Time: 20 Minutes

4.5. 2019 Capital Improvement Committee Work Plan. 19-1084

Recommendation: Review the 2019 Capital Improvement Program Committee Work Plan and make revisions as necessary.

Manager: Michele King, 408-2630-2711

Attachments: Attachment 1: 2019 CIP Committee Workplan

Est. Staff Time: 5 Minutes

5. INFORMATION ITEMS:

6. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS.

This is an opportunity for the Clerk to review and obtain clarification on any formally moved, seconded, and approved requests and recommendations made by the Committee during the meeting.

7. ADJOURN:

7.1. Adjourn to Regular Meeting at 10:00 a.m., on December 12, 2019, in the Santa Clara Valley Water District (HQ Boardroom/Board Conference Room A-124), 5700 Almaden Expressway, San Jose, California.

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Santa Clara Valley Water District

File No.: 19-1083

Agenda Date: 11/18/2019
Item No.: 3.1.

COMMITTEE AGENDA MEMORANDUM

Capital Improvement Program Committee

SUBJECT:
Approval of October 21 and 24, 2019 Meeting Minutes.

RECOMMENDATION:
Approve the minutes.

SUMMARY:
In accordance with the Ralph M. Brown Act, a summary of Committee discussions, and details of all actions taken by the Capital Improvement Program Committee, during all open and public Committee meetings, is transcribed and submitted to the Committee for review and approval.

Upon Committee approval, minutes transcripts are finalized and entered into the Committee's historical record archives, and serve as the official historical record of the Committee's meeting.

ATTACHMENTS:
Attachment 1: 102119 CIP Committee Minutes
Attachment 2: 102419 CIP Committee Minutes

UNCLASSIFIED MANAGER:
Michele King, 408-630-2711

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SANTA CLARA VALLEY WATER DISTRICT

CAPITAL IMPROVEMENT PROGRAM COMMITTEE MEETING

MINUTES

MONDAY, OCTOBER 21, 2019
10:00 AM

(Paragraph numbers coincide with agenda item numbers)

A special meeting of the Santa Clara Valley Water District (Valley Water) Capital Improvement Program Committee (Committee) was called to order in the Valley Water Conference Room A-124, 5700 Almaden Expressway, San Jose, California, at 10:00 a.m.

1. CALL TO ORDER/ROLL CALL.

Committee members in attendance were District 6 Director T. Estremera, District 4 Director L. LeZotte, and District 5 Director N. Hsueh, Chairperson presiding, constituting a quorum of the Committee.

Staff members in attendance were N. Camacho, Chief Executive Officer, L. Orta, Senior Assistant District Counsel, N. Dominguez, Assistant Deputy Clerk II, M. Baratz, S. Berning, T. Bramer, J. Collins, R. Fuller, C. Hakes, B. Hopper, E. Meeks, N. Nguyen, and J. Villarreal.

2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA.

Chairperson Hsueh declared time open for public comment on any item not on the agenda. There was no one present who wished to speak.

3. ACTION ITEMS

3.1 Information on Project Labor Agreements.

Recommendation:
A. Receive information from staff regarding how Project Labor Agreements may impact Valley Water's capital projects; and
B. Provide input to staff and discuss recommending to the Board whether Valley Water should pilot a Project Labor Agreement on a capital project.

Mr. Michael Baratz, Labor Relations Officer reviewed the information on this item, per the attached Committee Agenda Memo, and corresponding presentation materials contained in Attachment 1, and Handouts 3.1-A through 3.1-C.

Mr. Kenneth Wong, County of Alameda, discussed factors affecting Project Labor Agreement (PLA) efficacy, economy and market conditions, general contractor

and subcontractor relationships, size and sophistication of general contractors, labor disputes and general availability of crafts in the area, size and duration of projects, collective bargaining contract expiration during PLA projects, impacts of government delays in contract award and performance, project delivery methods, political climate, signatories, and the pros and cons pf PLAs, as contained in Handout 3.1-E. A copy of the Handout was distributed to the Committee, and made available to the public.

Mr. Joe Flatley, former Milpitas Unified School District employee, discussed his experience negotiating a Project Stabilization Agreement (PSA) for a modernization project, which included a core worker provision. He discussed his experience working with the Santa Clara and San Benito Counties Building and Construction Trades during the negotiation process, and the benefits of pre-project meetings, which included scope of work review and agreement of duties by trade.

Mr. Thomas Esch, Purchasing and Consultant Contracts Unit Manager, discussed his experience negotiating PLAs during his tenure with Valley Transportation Authority and the benefits of PLAs.

Ms. Nicole Goehring, Associated Building and Contractors Northern California, expressed opposition to PLAs.

Mr. David Bini, Santa Clara and San Benito Counties Building and Construction Trades, discussed prevailing wages and benefits in regard to PLA projects.

Chairperson Hsueh acknowledged receipt of the attached correspondence from Victor Gomez, Executive Director, Business San Jose Chamber Political Action Committee Board of Trustees, identified as Handout 3.1-D, opposing PLAs.

It was moved by Director Estremera, seconded by Chairperson Hsueh, and approved by a vote of 2:1, to support a recommendation to the Board as follows: If the CIP Committee's concerns regarding supporting small businesses can be addressed, along with any additional concerns that the Board may identify, then the Board should consider moving forward with supporting a Project Labor Agreement. Director LeZotte voted no.

6. CLERK'S REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS AND RECOMMENDATIONS:

Ms. Natalie Dominguez, Assistant Deputy Clerk II, read the new Committee recommendations into the record, as follows:

In regard to Item 3.1:

The Committee voted to support a recommendation to the Board as follows: If the CIP Committee's concerns regarding supporting small businesses can be addressed, along with any additional concerns that the Board may identify, then the Board should consider moving forward with supporting a Project Labor Agreement.

7. ADJOURN

Chairperson Hsueh adjourned the meeting at 12:05 p.m., to the special meeting at 10:30 a.m., on October 24, 2019, in the Valley Water Headquarters, Conference Room A-124, 5700 Almaden Expressway, San Jose, California.

Natalie F. Dominguez, CMC
Assistant Deputy Clerk II

Approved:

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SANTA CLARA VALLEY WATER DISTRICT

CAPITAL IMPROVEMENT PROGRAM COMMITTEE MEETING

MINUTES

THURSDAY, OCTOBER 24, 2019
10:30 AM

(Paragraph numbers coincide with agenda item numbers)

A rescheduled regular meeting of the Santa Clara Valley Water District (Valley Water) Capital Improvement Program Committee (Committee) was called to order in the Valley Water Headquarters, Conference Room A-124, 5700 Almaden Expressway, San Jose, California, at 10:30 a.m.

1. CALL TO ORDER/ROLL CALL.

Committee members in attendance were District 4 Director L. LeZotte, and District 5 Director N. Hsueh, Chairperson presiding, constituting a quorum of the Committee.

District 6 Director T. Estremera arrived as noted below.

Staff members in attendance were S. Berning, R. Blank, T. Bramer, T. Bridgen, J. Brosnan, C. Cannard, J. Collins, N. Dominguez, M. Ganjoo, C. Hakes, L. Hoang, J. Martin, A. Mendiola, N. Nguyen, L. Orta, M. Richardson, A Rouhani, K. Sibley, G. Vallin, and B. Yerrapotu.

2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA.

Chairperson Hsueh declared time open for public comment on any item not on the agenda. There was no one present who wished to speak.

3. APPROVAL OF MINUTES.

3.1. Approval of September 23, 2019 Meeting Minutes.

Recommendation: Approve the minutes.

The Committee considered the attached minutes of the September 23, 2019 meeting. It was moved by Director LeZotte, seconded by Chairperson Hsueh, and carried that the minutes be approved as presented. Director Estremera was absent.

4. **ACTION ITEMS**

4.1 Update on the Upper Penitencia Creek Flood Protection Project.

Recommendation: Receive an update on the Upper Penitencia Creek Flood Protection Project Planning Study.

Mr. Afshin Rouhani, Water Policy and Planning Manager, and Mr. Gabriel Vallin, Associate Civil Engineer, reviewed the information on this item, per the attached Committee Agenda Memo, and corresponding presentation materials contained in Attachment 1.

The Committee noted the information, without formal action.

4.2. Update on the Almaden Lake Improvement Project.

Recommendation: Receive an update on the Almaden Lake Improvement Project.

Ms. Rechelle Blank, Assistant Officer, reviewed the information on this item, per the attached Committee Agenda Memo, and corresponding presentation materials contained in Attachment 1.

Director Estremera arrived.

The Committee noted the information, without formal action.

4.3. Capital Project Monitoring – Planning and Feasibility.

Recommendation: Receive information, discuss planning and feasibility resources needs, and make recommendations as necessary.

Chairperson Hsueh reviewed the information on this item, per the attached Committee Agenda Memo, and the corresponding presentation materials contained in Attachment 1 were reviewed by staff as follows: Mr. Tim Bramer, Acting Deputy Operating Officer, reviewed Items 1 and 6 through 8; Mr. Chris Hakes, Deputy Operating Officer, reviewed Items 2 through 5, and 10; Mr. Ngoc Nguyen, Deputy Operating Officer, reviewed Items 9 and 13; Mr. Rouhani reviewed Items 11, 12, 14, 15, 17 and 18; Mr. Kevin Sibley, Senior Engineer, reviewed Item 16; and Mr. Chris Cannard, Information Technology Manager, reviewed Items 19 and 20.

The Committee noted the information, without formal action.

In regard to the Almaden Lake Project, Director LeZotte requested to be notified of upcoming meetings to be held with the landscape architect.

4.4. Capital Improvement Program Committee Work Plan.

Recommendation: Review the 2019 Capital Improvement Program Committee Work Plan and make revisions as necessary.

Chairperson Hsueh reviewed the information on this item, per the attached Committee Agenda Memo, and the corresponding presentation materials contained in Attachment 1.

Chairperson Hsueh approved staff's request to revise the 2019 Work Plan to include a discussion regarding increasing the Facilities Small Capital Projects threshold from $2 million to $3 million in future years during the November 18, 2019 meeting.

6. CLERK'S REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS AND RECOMMENDATIONS:

Ms. Natalie Dominguez, Assistant Deputy Clerk II, read the new Committee request into the record, as follows:

In regard to Item 4.4, Chairperson Hsueh approved staff's request to revise the 2019 Work Plan to include a discussion regarding increasing the Facilities Small Capital Projects threshold from $2 million to $3 million in future years during the November 18, 2019 meeting.

7. ADJOURN

Chairperson Hsueh adjourned the meeting at 12:05 p.m., to the next scheduled meeting at 10:00 a.m., on November 18, 2019, in the Valley Water Headquarters, Conference Room A-124, 5700 Almaden Expressway, San Jose, California.

Natalie F. Dominguez, CMC
Assistant Deputy Clerk II

Approved:

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Santa Clara Valley Water District

File No.: 19-0805

Agenda Date: 11/18/2019
Item No.: 4.1.

COMMITTEE AGENDA MEMORANDUM

Capital Improvement Program Committee

SUBJECT:
Update on the Palo Alto Flood Basin Tide Gate Structure Improvements Project, Project No. 10394001, (City of Palo Alto, District 7).

RECOMMENDATION:
Receive the Update on the Palo Alto Flood Basin Tide Gate Structure Improvements Project.

SUMMARY:
Background:

The Palo Alto Flood Basin (PAFB) tide gate structure was constructed in1957 by the Santa Clara County Flood Control and Water Conservation District (Valley Water), Santa Clara County, and the City of Palo Alto. A map of the PAFB is included as Attachment 1.

In 2012, Valley Water completed emergency repairs to stop seepage flow beneath the structure. As part of that effort, staff prepared a post construction report which detailed the emergency work and recommended replacement of the tide gate structure.

In 2014, Valley Water retained the services of Mark Thomas & Co (MT) to perform structural inspections and prepare an assessment report for the tide gate structure. The report concluded that the structure was in generally good condition and recommended approximately $180,000 in minor structural repairs.

In 2017, Valley Water retained a construction contractor to perform minor maintenance repairs; however, the work was complicated by cracks in the bottom slab and stopped during the dewatering process. A subsequent letter prepared by MT in October 2017 recommended the structure be replaced in the next couple of years.

In 2018, Valley Water management directed a new team to complete planning, design, and construction of a new tide gate structure.

On January 8, 2018, the project team met with the City of Palo Alto to coordinate ongoing efforts and next steps. The team discussed Project alignment with the San Francisquito Creek Joint Powers Authority's (SFCJPA) Strategy to Advance Flood protection, Ecosystems and Recreation Project (SAFER Bay), the City of Mountain View's South Bay Salt Pond Restoration Project (Mountain View Ponds), and the South San Francisco Bay Shoreline Project (Shoreline Project). The team also

discussed an inter-agency cost share agreement to fund the Project, PAFB data sharing, and Valley Water's emergency action plan for the PAFB, Adobe Creek, Barron Creek, and Matadero Creek.

On October 29, 2018, the project team met with the City of Palo Alto, the City of Mountain View, and the SFCJPA to ensure inter-agency coordination and advance the planning, design, and construction of the Project. During the meeting the team learned that the SAFER Bay project is expected to complete planning by 2026 and that the Mountain View Ponds project is expected to begin construction in 2020. The team agreed that given the risk of failure of the tide gate structure, the Project should proceed with planning, design, and construction.

In order to minimize the consequences of failure, Staff prepared an Emergency Action Plan (EAP) which was reviewed and accepted by the City of Palo Alto.

Currently, Valley Water maintenance staff performs routine inspections of the PAFB levees, tide gate structure, and passive tide gates, and the City of Palo Alto operates one motor driven sluice gate, and adjusts the water circulation as needed for vector control and salinity purposes.

Description

The structural engineering assessment completed in 2017 estimated that the tide gate structure could fail within approximately two to three years. If the structure fails, the tidal water could flood approximately 460 residences, 2 schools, 7 businesses, and Hwy 101 during two-year frequency peak high tide events. In addition to tidal flooding in low elevation areas, flooding from tributary creeks could worsen during high tide events as tidal water pushes upstream and reduces channel design capacity.

The Project evaluated three alternatives: No Action (Alternative A), New Structure Upstream of Existing Tide Gate Structure Location (Alternative B), and New Structure Next to Existing Tide Gate Structure Location (Alternative C).

Alternatives Considered

No Action - Alternative A

Alternative A is included to identify expected impacts to the tide gate structure and areas affected by failure at the tide gate structure if no project is constructed. The EAP will be implemented in case of eminent failure.

New Structure Upstream of Existing Tide Gate Structure Location - Alternative B

Alternative B includes five stages (construction seasons) to construct a new tide gate structure upstream from the existing structure as shown in Attachment 2.

Stage 1 (September 2021 - January 2022) would include installation of a sheet pile cofferdam to dewater the work area, excavation of levee soils, and construction of the pile foundation for the first

half of the new structure. The existing structure would function as is for flows.

Stage 2 (September 2022 - January 2023) would include complete construction of the first half of the new tide gate structure and tide gates, and construction of an outlet channel, while the existing tide gate structure functions as is for flows.

Stage 3 (September 2023 - January 2024) would include installation of a second sheet pile cofferdam to dewater the second work area, and construction of the second half of pile foundation. The first half of the new structure would bypass flows out of the flood basin in lieu of the existing structure.

Stage 4 (September 2024 - January 2025) would include removal of the existing structure, completion of construction of the second half of the new structure and tide gates, and completion of necessary soil improvements for the new levee. The first half of the new structure would continue to serve as a bypass for flows.

Stage 5 (September 2025 - January 2026) would include complete construction of the new levee and removal of all cofferdam dewatering systems.

New Structure Next to Existing Tide Gate Structure Location - Alternative C

Alternative C includes four stages (construction seasons) to construct a new tide gate structure adjacent and approximately 50 feet east of the existing structure as shown in Attachment 3.

Stage 1 (September 2021 - January 2022) would include installation of a sheet pile cofferdam to dewater the work area, excavation of levee soils, and construction of the pile foundation for the entire new structure.

Stage 2 (September 2022 - January 2023) would include completing construction of the new tide gate structure and tide gates, and construction of an outlet channel, while the existing tide gate structure functions as is for flows.

Stage 3 (September 2023 - January 2024) would include installation of a second sheet pile cofferdam to dewater the second work area, removal of existing tide gate structure, and completion of necessary soil improvements for the new levee.

Stage 4 (September 2024 - January 2025) would include complete construction of the new levee and remove all dewatering systems.

Recommended Alternative

The Staff Recommended Alternative was determined by comparing various criteria of Alternative B and Alternative C as listed in Attachment 4 and Attachment 5. Both feasible alternatives include identical new tide gate structures. However, Alternative C is recommended for the below reasons:

1. Alternative C construction duration would be 12 months less than Alternative B.

2. Alternative C would include less construction risk for schedule and cost overruns.

3. Alternative C would be easier to permit compared to Alternative B due to a reduced construction footprint, and shorter construction duration.

4. The total approximate project cost of Alternative B and Alternative C is $36,998,000 and $31,835,600 respectively. Alternative C provides $5,162,400 in cost savings.

The project team concluded that both Alternative B and Alternative C provides critical flood protection. However, Alternative C has the least environmental impact, timeliest, and most cost effective. The project team recommends that Alternative C be advanced to the design and construction phases.

FINANCIAL IMPACT:
The estimated total project cost for implementing Alternative C is $31,835,600. This project is funded from the Watersheds and Stream Stewardship Fund 12.

CEQA:
A Mitigated Negative Declaration is being prepared for this project.

ATTACHMENTS:
Attachment 1: Map
Attachment 2: Alternative B Construction Staging
Attachment 3: Alternative C Construction Staging
Attachment 4: Feasible Alternatives Matrix
Attachment 5: Presentation

UNCLASSIFIED MANAGER:
Ngoc Nguyen, 408-630-2632


Legend
Palo Alto Flood Basin
N
S
E
W
San Francisco Bay
San Francisquito Creek
Mayfield Slough
Palo Alto Flood Basin Tide Gate Structure
Palo Alto Golf Course
Palo Alto Airport
Landfill
Palo Alto Flood Basin
Charleston Slough
Coast Casey Pump Station
Hwy 101
Matadero Creek
Barron Creek
Adobe Creek
Permanente Creek
Shoreline Park
Shoreline Lake
Bayshore Fwy
E Bayshore Rd
W Bayshore Rd
Greer Rd
Oregon Expy
Wisteria Dr
E Meadow Dr
E Charleston Rd
Charleston Rd
Amphitheatre Pkwy
Garcia Ave
Leghorn St
Old Middlefield Way
Rengstorff Center
Greendell School
Alma St
Fabian Way
N Shoreline Blvd
Landings Dr
Cowper St
Ross Rd
South Ct
Bryant St
Ramona St
0
1,600
3,200
6,400
Feet
Approximate Scale
Sources: Esri, HERE, Garmin, USGS, NRCan, Esri Japan, METI, Esri China (Thailand), NGCC, © OpenStreetMap Community
Valley Water
Clean Water • Healthy Environment • Flood Protection

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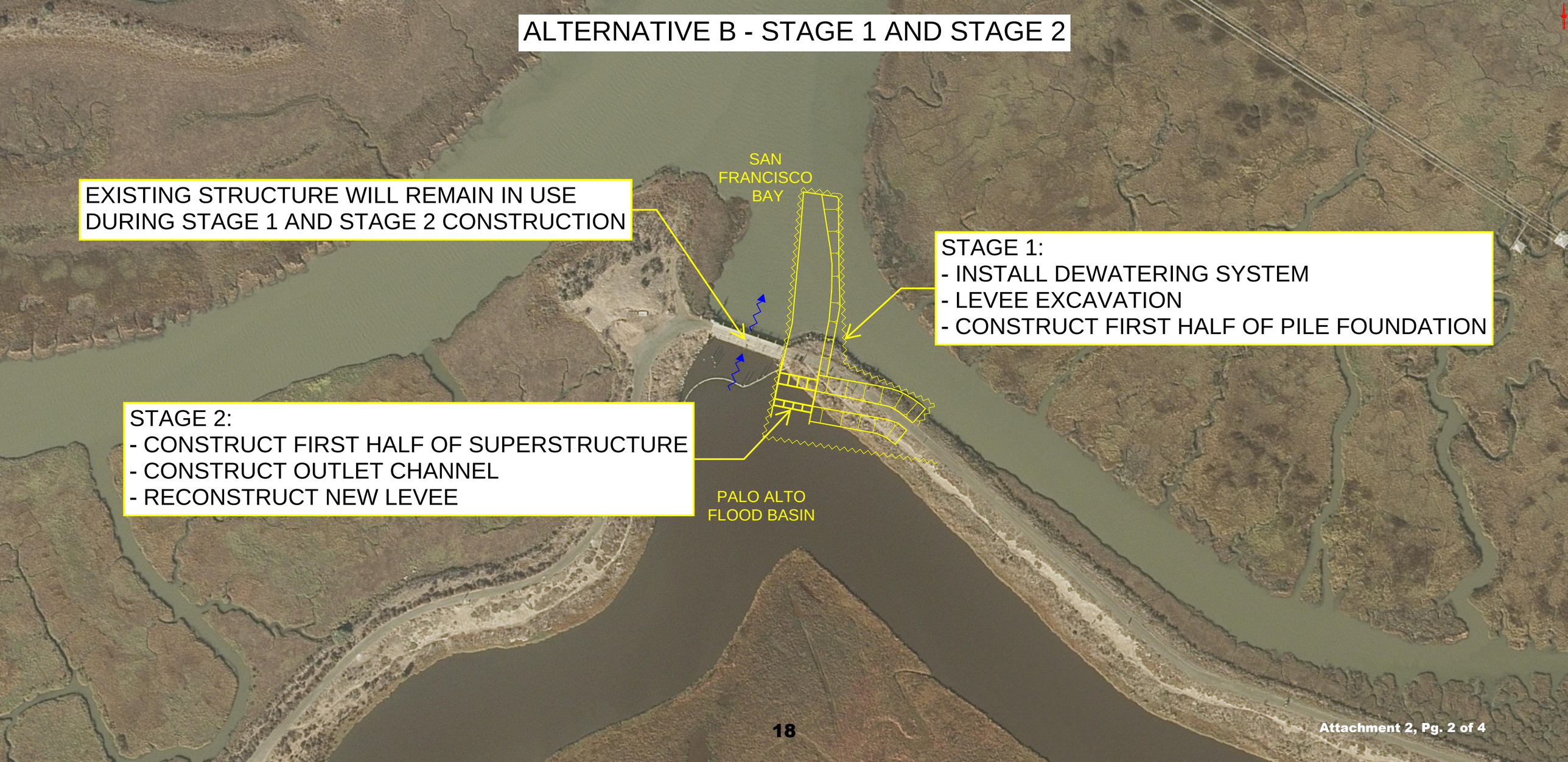
Alternative B Construction Staging
EXISTING TIDE GATE STRUCTURE

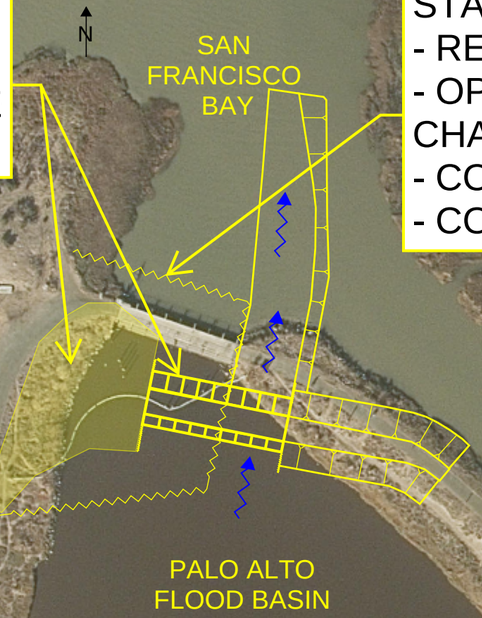
ALTERNATIVE B - STAGE 1 AND STAGE 2



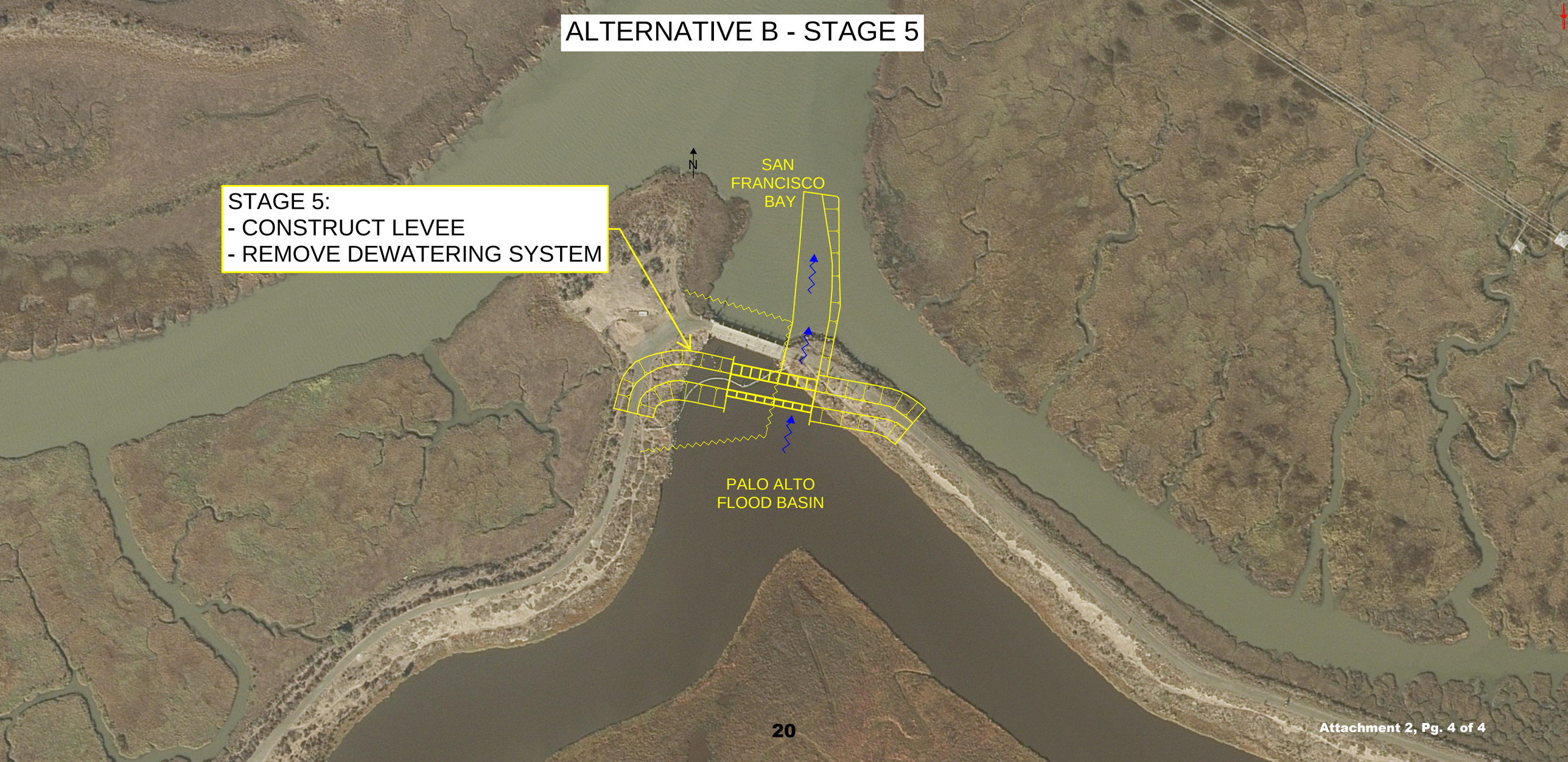
ALTERNATIVE B - STAGE 3 AND STAGE 4

STAGE 4:
- REMOVE EXISTING STRUCTURE
- CONSTRUCT SECOND HALF OF SUPERSTRUCTURE
- CONSTRUCT GROUND IMPROVEMENTS

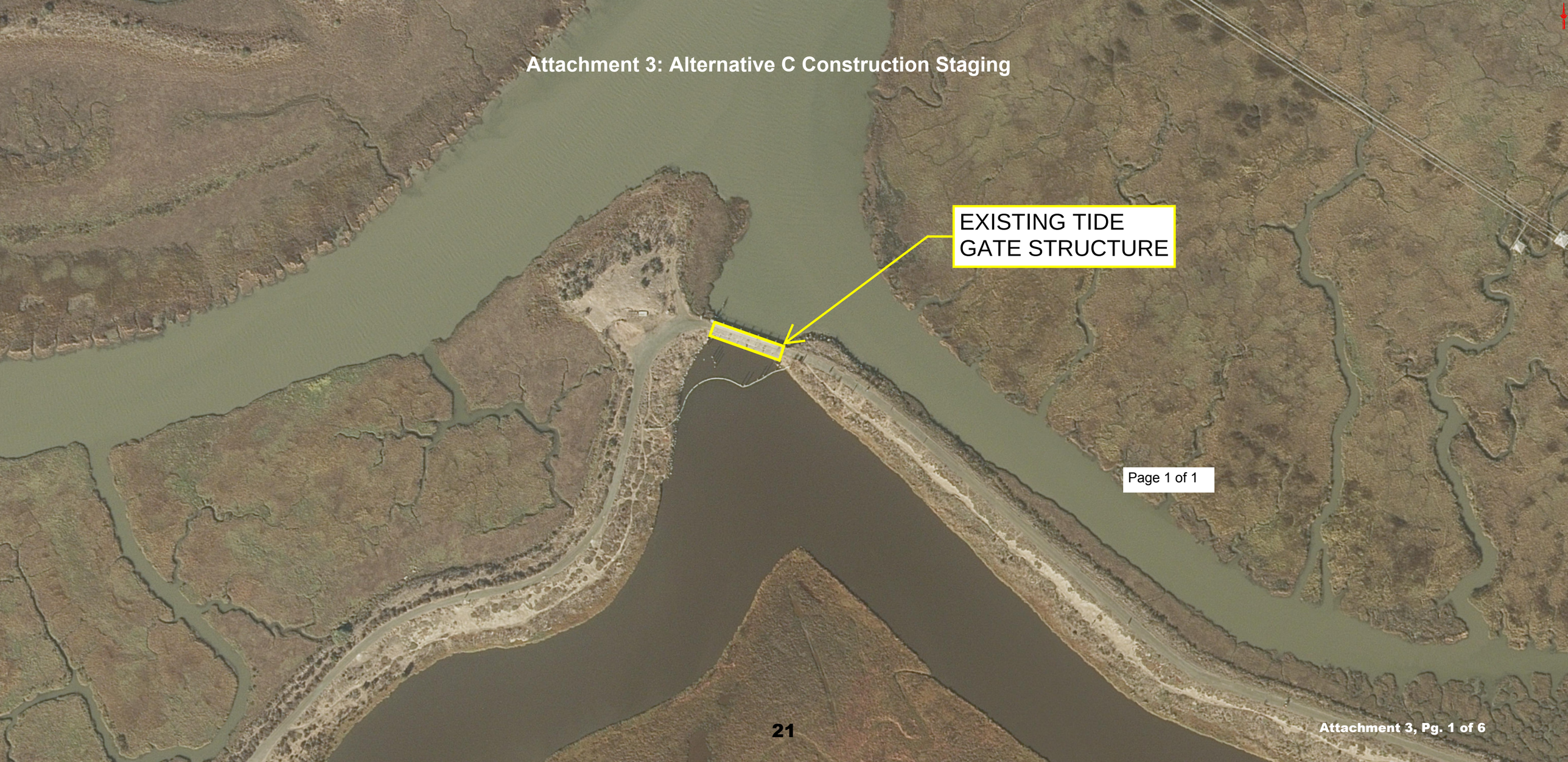
STAGE 3:
- REMOVE DEWATERING SYSTEM
- OPEN FIRST HALF OF NEW STRUCTURE AND OUTLET CHANNEL
- CONSTRUCT DEWATERING SYSTEM FOR NEW AREA
- CONSTRUCT SECOND HALF OF PILE FOUNDATION



ALTERNATIVE B - STAGE 5

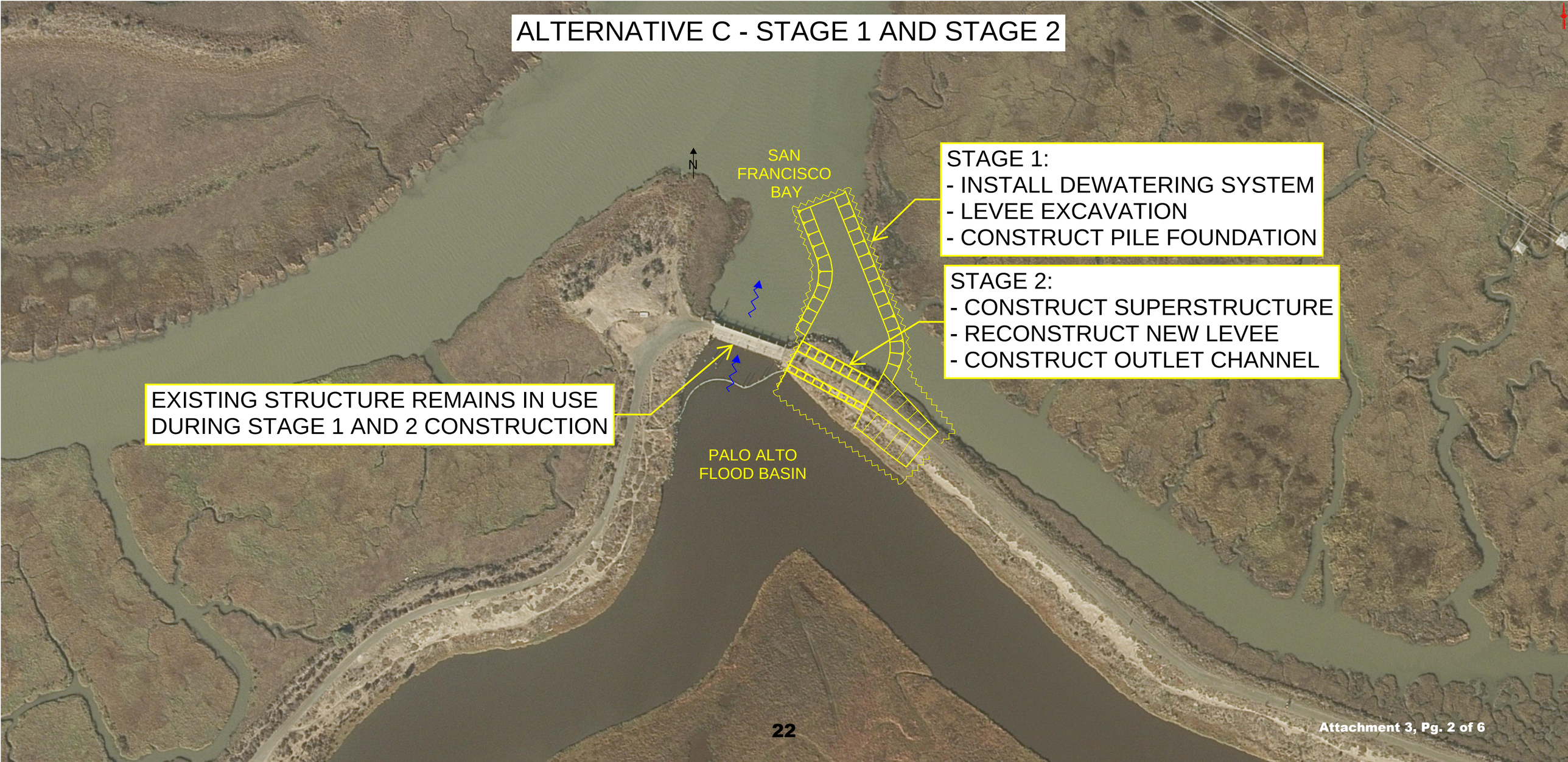


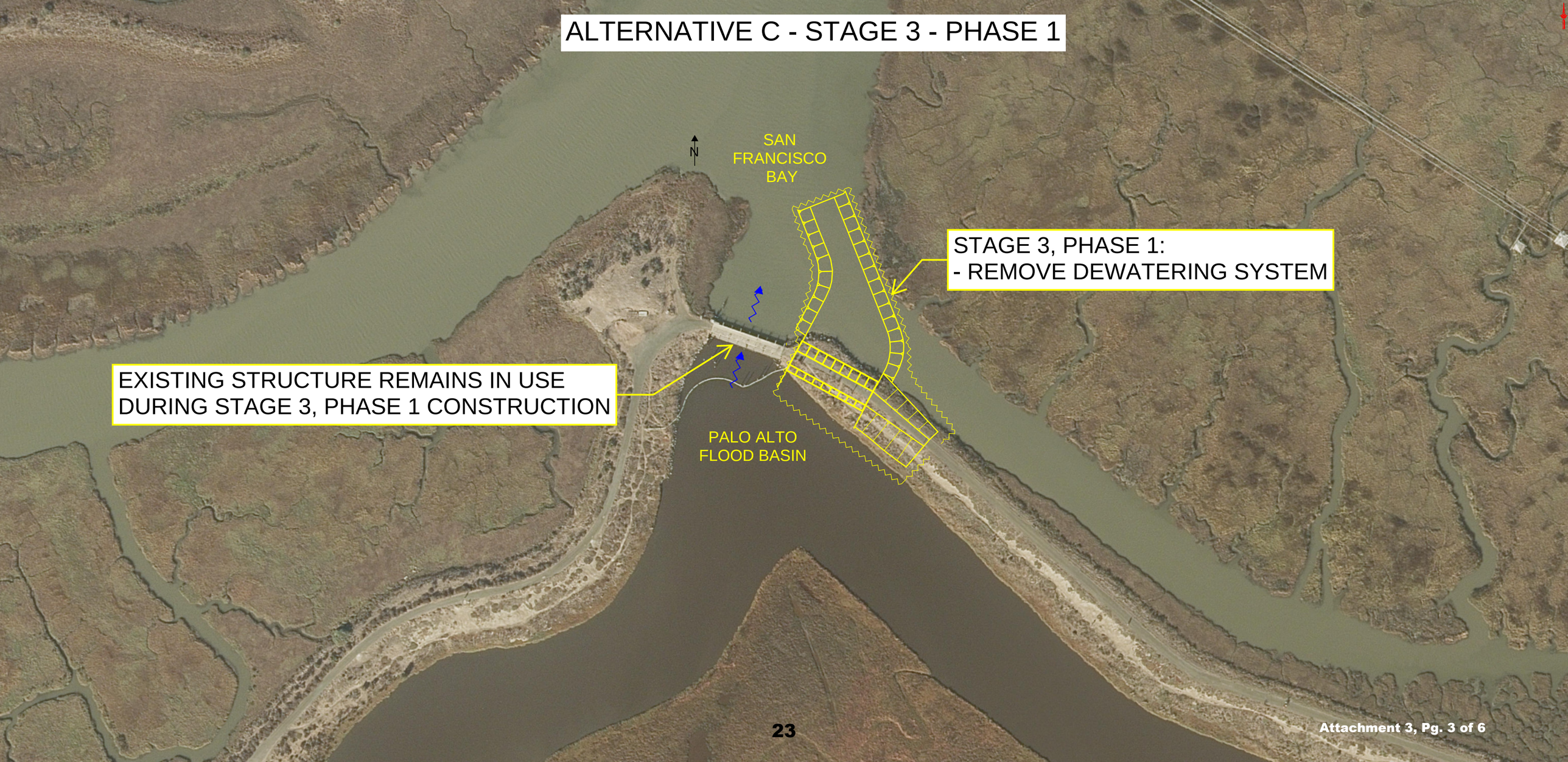
Attachment 3: Alternative C Construction Staging



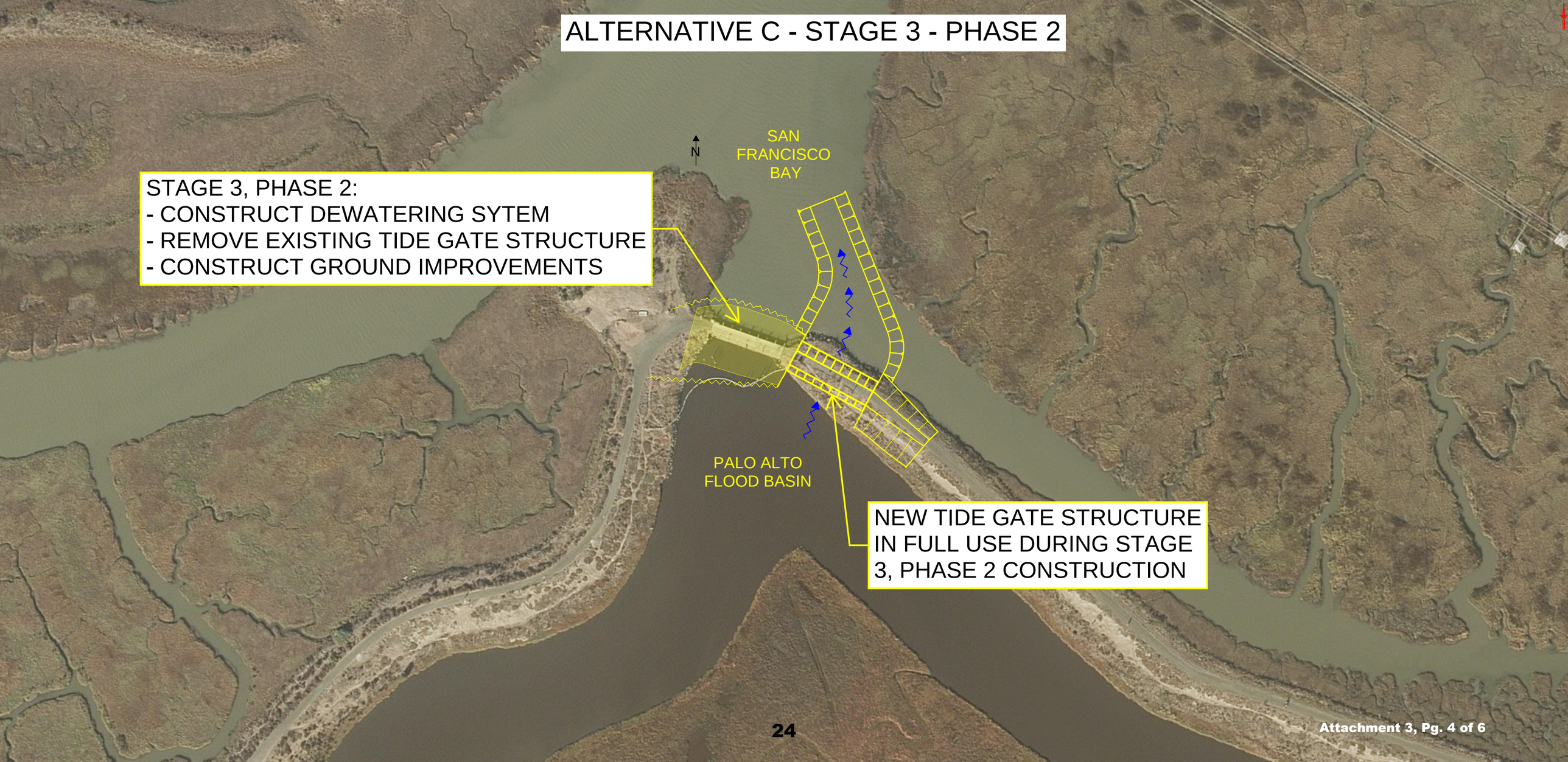
Page 1 of 1

ALTERNATIVE C - STAGE 1 AND STAGE 2




ALTERNATIVE C - STAGE 3 - PHASE 1
N
SAN
FRANCISCO
BAY
STAGE 3, PHASE 1:
- REMOVE DEWATERING SYSTEM
EXISTING STRUCTURE REMAINS IN USE
DURING STAGE 3, PHASE 1 CONSTRUCTION
PALO ALTO
FLOOD BASIN

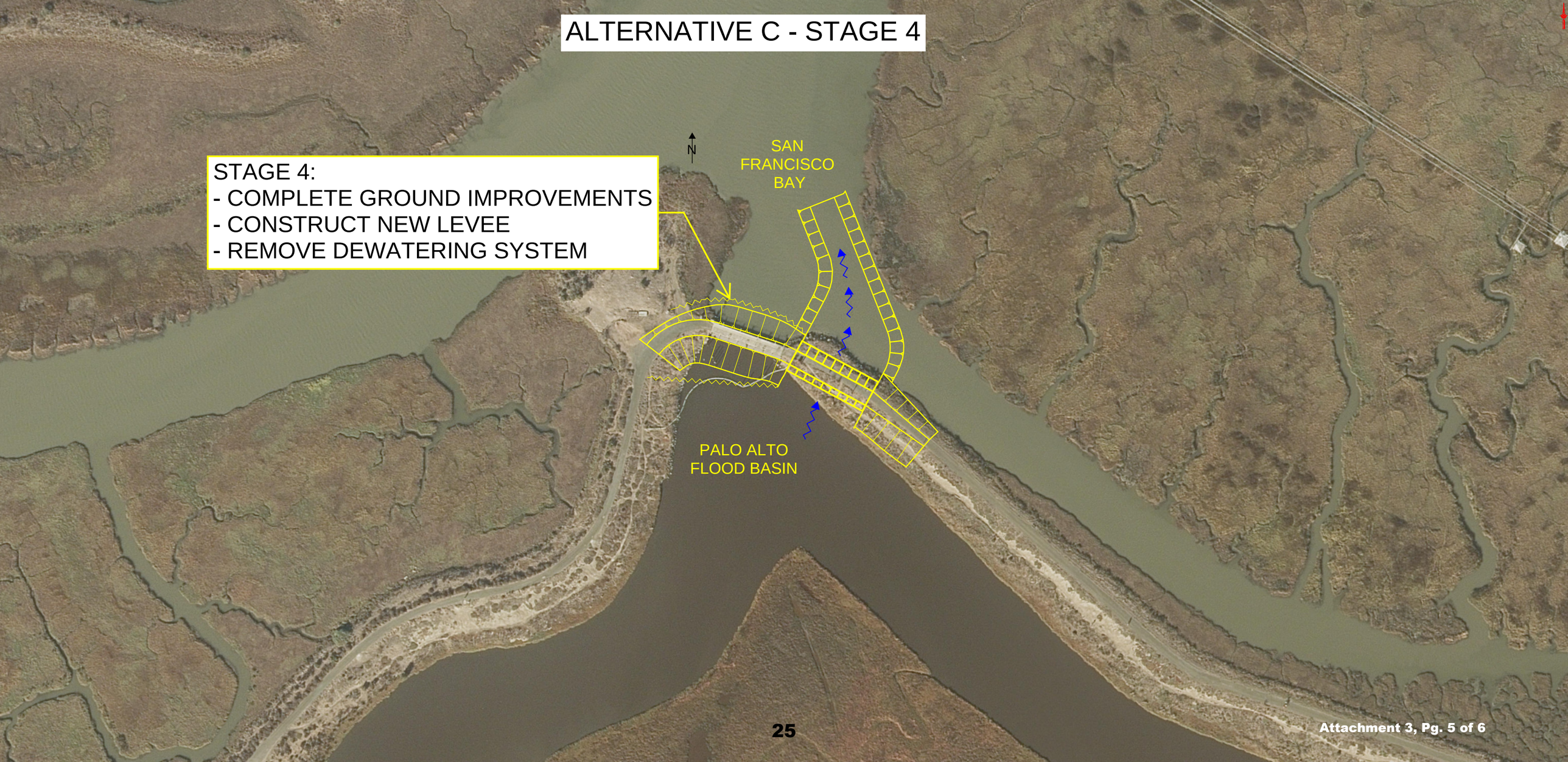
ALTERNATIVE C - STAGE 3 - PHASE 2



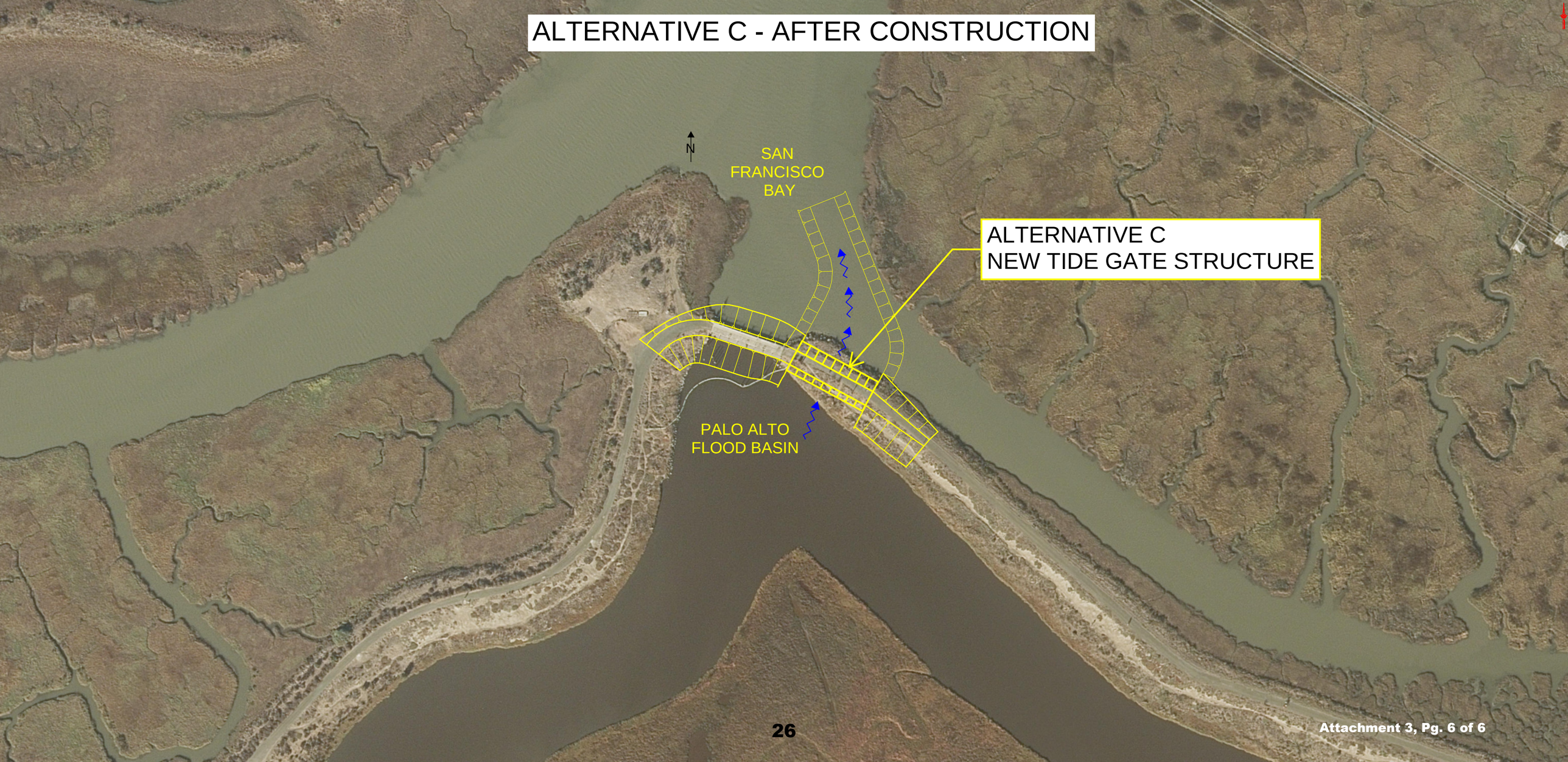
STAGE 3, PHASE 2:
- CONSTRUCT DEWATERING SYTEM
- REMOVE EXISTING TIDE GATE STRUCTURE
- CONSTRUCT GROUND IMPROVEMENTS

NEW TIDE GATE STRUCTURE IN FULL USE DURING STAGE 3, PHASE 2 CONSTRUCTION

ALTERNATIVE C - STAGE 4



ALTERNATIVE C - AFTER CONSTRUCTION



Feasible Alternatives Matrix

Alternative Element		**Alternative A** No Action	**Alternative B** New Structure Upstream from Existing Tide Gate Structure Location	**Alternative C** New Structure Next to Existing Tide Gate Structure Location
Construction Footprint Area		N/A	3.1 acres	2.6 acres
Native Planting Area		N/A	0.6 acres	0.4 acres
Number of Construction Season		N/A	5	4
Environmental Impact		* Potential loss of brackish marsh habitat. * 2-year flooding of 460 residences, 2 schools, 7 businesses, and temporary closure of Highway 101.	* Temporary impacts during the construction work windows for 5 seasons. * Current brackish marsh habitat will be maintained.	* Temporary impacts during the construction work windows for 4 seasons. * Current brackish marsh habitat will be maintained.
Impact to Trail Users		Trail is expected to be lost when tide gate structure fails.	The trail will be closed at the limits of the construction area for 53 months.	The trail will be closed at the limits of the construction area for 41 months.
Construction Uncertainties		N/A	Higher risk of construction complications due to unknown subsurface conditions, and staged construction of the tide gate structure.	Lower risk of construction complications.
Ease of Permitting		N/A	Permitting will be considerably difficult due to longer construction time and larger construction footprint area.	Permitting will be easier compared to Alternative B due to shorter construction time and reduced construction footprint area.
Mitigates Against SLR		No	Partial mitigation	Partial mitigation
O&M Cost (OP)	Annual	**$ -**	$ 8,400	$ 8,400
	Over 50 Years	**$ -**	$ 1,400,000	$ 1,400,000
Construction Cost		**$ -**	$ 31,147,200	$ 26,429,200
Planning & Design Cost		**$ -**	$ 3,264,000	$ 2,947,000
Permitting Cost		**$ -**	$ 1,186,800	$ 1,059,400
Total 50-Year Lifetime Cost		**N/A**	**$ 36,998,000**	**$ 31,835,600**

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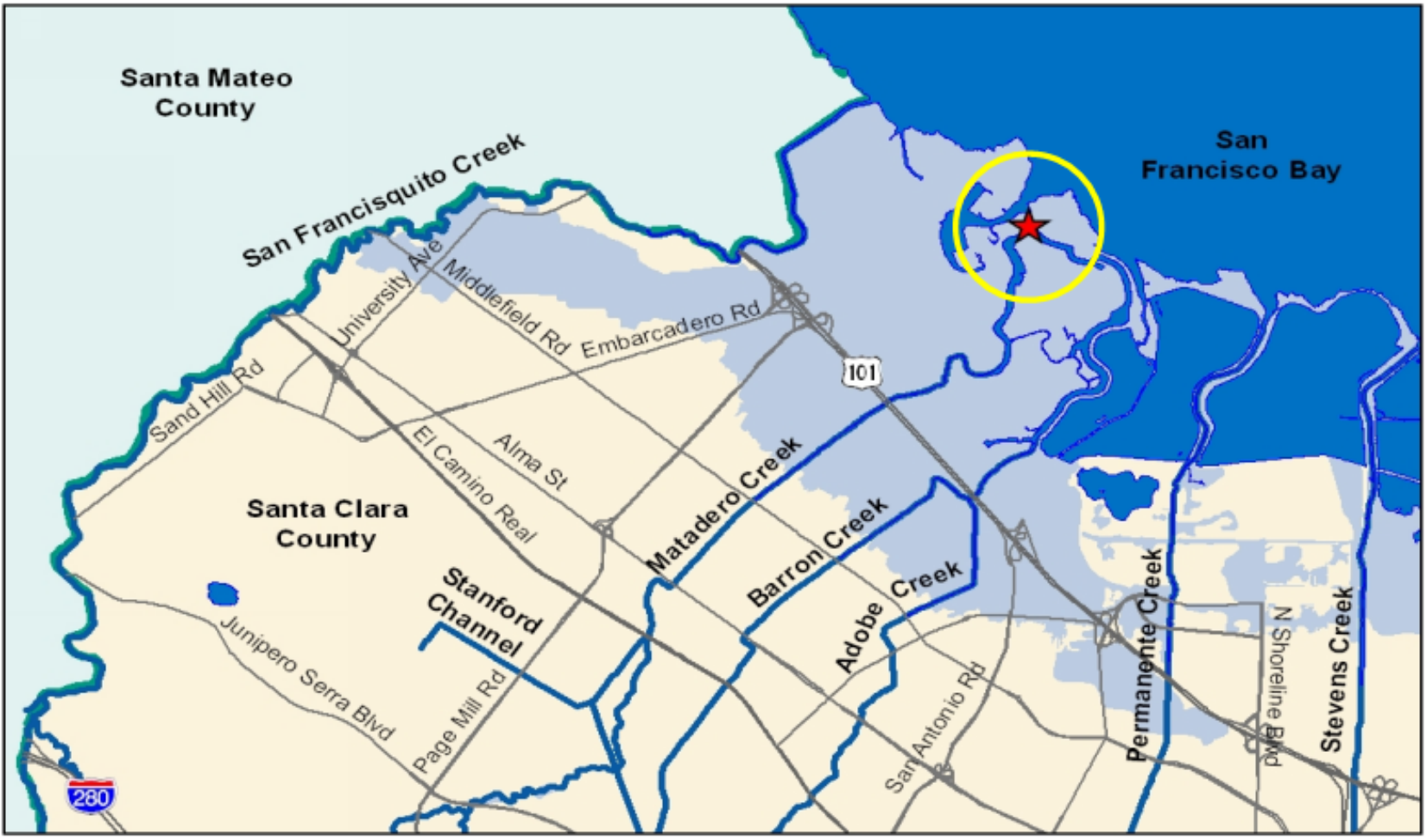
Palo Alto Flood Basin Tide Gate Structure Improvements

Presented by: **Roger Narsim**, Unit Manager

Valley Water

Project Location (District 7)



Project Location

1 Percent Floodplain


EXISTING TIDE
GATE STRUCTURE

Stakeholders

- San Francisquito Creek Joint Powers Authority (SFCJPA)
- City of Palo Alto (City of PA)
- City of Mountain View (City of MW)
- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)
- National Marine Fisheries Service (NMFS/NOAA)
- California Department of Fish and Wildlife (CDFW)
- San Francisco Bay Regional Water Quality Control Board
- Santa Clara County Vector Control District (SCCVCD)
- San Francisco Bay Trail (Bay Trail)
- California State Coastal Conservancy (SCC)
- San Francisco Bay Conservation and Development Commission (BCDC)

Meeting History w/ Stakeholders

- January 2018 – Background, Problem definition, emergency action plan, and cost share request wit City of PA
- October 2018 – Preliminary design criteria meeting including project coordination with Shoreline Levee Project with SFCJPA, City of PA, City of MW
- April 2019 – Conceptual design meeting with City of PA
- August 2019 – Site meeting with SFCJPA, City of PA, Bay Trail, and permitting agencies

Meeting Objective

- Provide project background
- Provide problem definition
- Provide alternatives formulation and evaluation
- Discuss next steps
  - CIP Committee, November 18th
  - Full board meeting, January 14th
  - Public meeting presenting Draft Planning Study Report, February 2020

Background

- Tide gates constructed in 1957 by Santa Clara County Flood Control & Water Conservation District, Santa Clara County, and the City of Palo Alto
- Palo Alto Flood Basin (PAFB) controls starting water elevations for Adobe, Barron, and Matadero creeks
- Historically the City of Palo Alto owned gates in the basin before the current structure was built

Ownership

- The City of Palo Alto owns the land for the Palo Alto Flood Basin.
- Valley Water has easements granted in 1967 by City for surrounding creeks and levees, and tide gate structure.
- Valley Water/County did not own property nor have easement on lands when current tide gate structure was constructed.

Timeline: Previous Studies & Repairs

- PAFB Tide Gate Structure leaking reported (2011)
- PAFB Tide Gate Structure Monitoring (2011)
- PAFB Tide Gate Structure Emergency Repairs (2012)
  - Post-emergency repair report to USACE
  - New project initiated to replace structure within 5 years
- PAFB Tide Gate Structure Inspection Report (April 2014)
- Problem Definition/Refined Objectives Report (June 2016)
- PAFB Tide Gate Structure Maintenance Repairs, Incomplete (2017)
- Structural Assessment – replace within 2 years (2017)
- Project transferred to Design and Construction Unit 336 (2018)

Timeline: Work-to-date

- Geotechnical investigation & report (2018)
- Bathymetric survey (2018-2019)
- Project coordination w/ City of PA regarding electrical controls (June 2019)
- Hydraulic analysis of gate design (July 2019)
- Sea Level Rise (SLR) optimization, target 2 feet (July 2019)
- Project coordination/collaboration with stakeholders (2018-2019)
- Problem Definition/Refined Objectives Report (August 2019)
- Draft Planning Study Report (2019)

Tide Gate Structure Condition

Preliminary Design Criteria

- Provide 100-year flood risk reduction for Matadero Creek, Adobe Creek, and Barron Creek.
- Increased capacity for future Sea Level Rise (SLR)
- Located along future Shoreline Levee Project alignment
- Top of structure is 4 feet above the existing levee and consistent with City of Mountain View Shoreline Levee Project (Coast Casey)
- Meet current seismic design standards
- Increase safety and efficiency for future O&M.
- Increase efficiency with 8 side-hinged gates vs 15 top-hinge gates

Side gate versus Top gate efficiency

THIS SLIDE CONTAINS AN IMBEDDED VIDEO TO BE PLAYED DURING MEETING

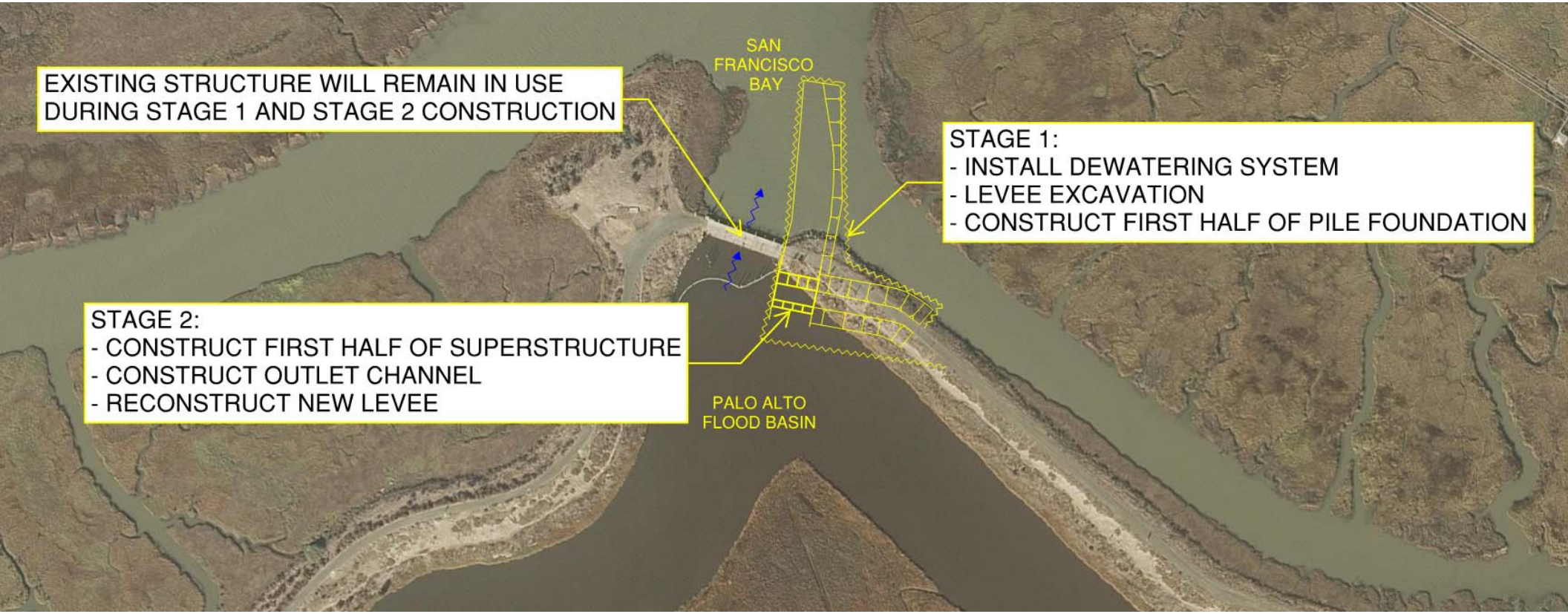
Alternatives Development

- Alternative A: "No Action"
- Alternative B: Construct in basin upstream from existing structure
- Alternative C: Construct in levee next to existing structure

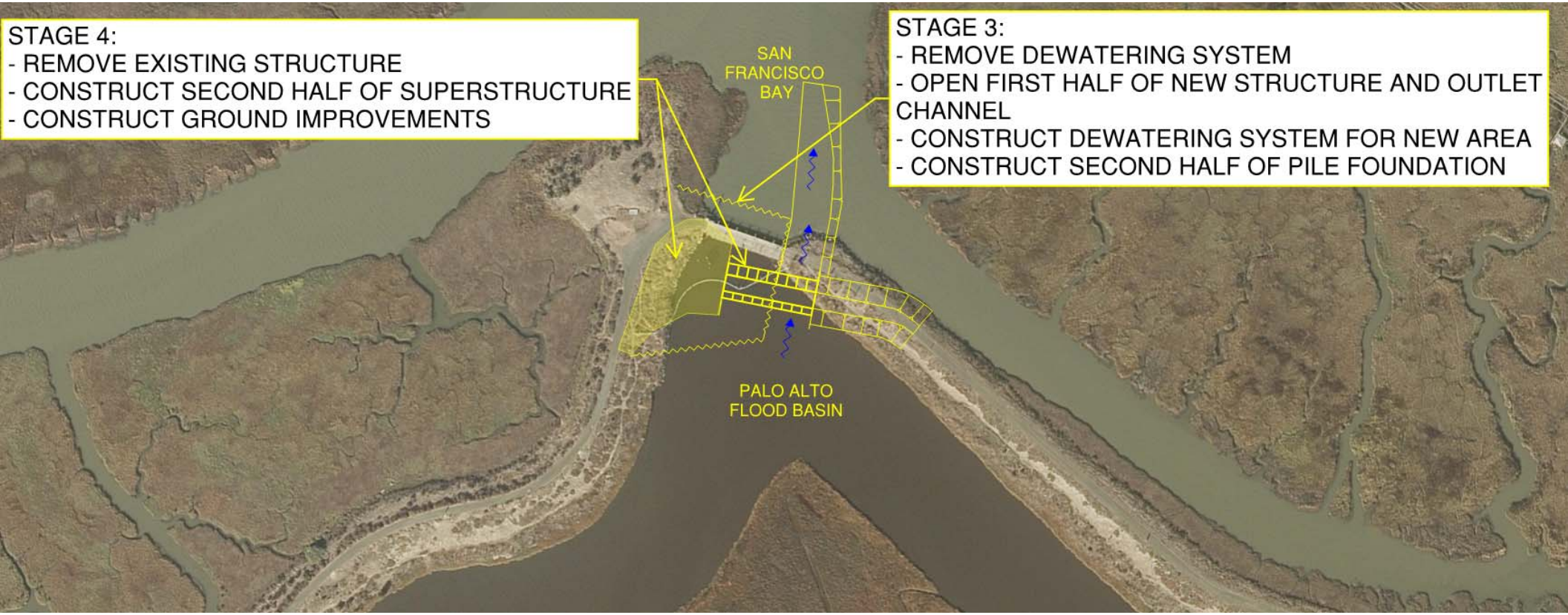
Alternative A: "No Action"

- 62-year old existing structure has structural and hydraulic deficiencies and maintenance is problematic and costly.
- Seismic vulnerabilities (timber piles and liquefiable soils)
- Leaking tide gates
- Holes in the bottom structure slab will worsen
- Spalled concrete and corroded steel reinforcement will worsen
- Does not account for increasing Sea Level Rise (SLR)
- A failed tide gate structure could potentially flood 460 residences, 2 schools, 7 businesses, and Highway 101.

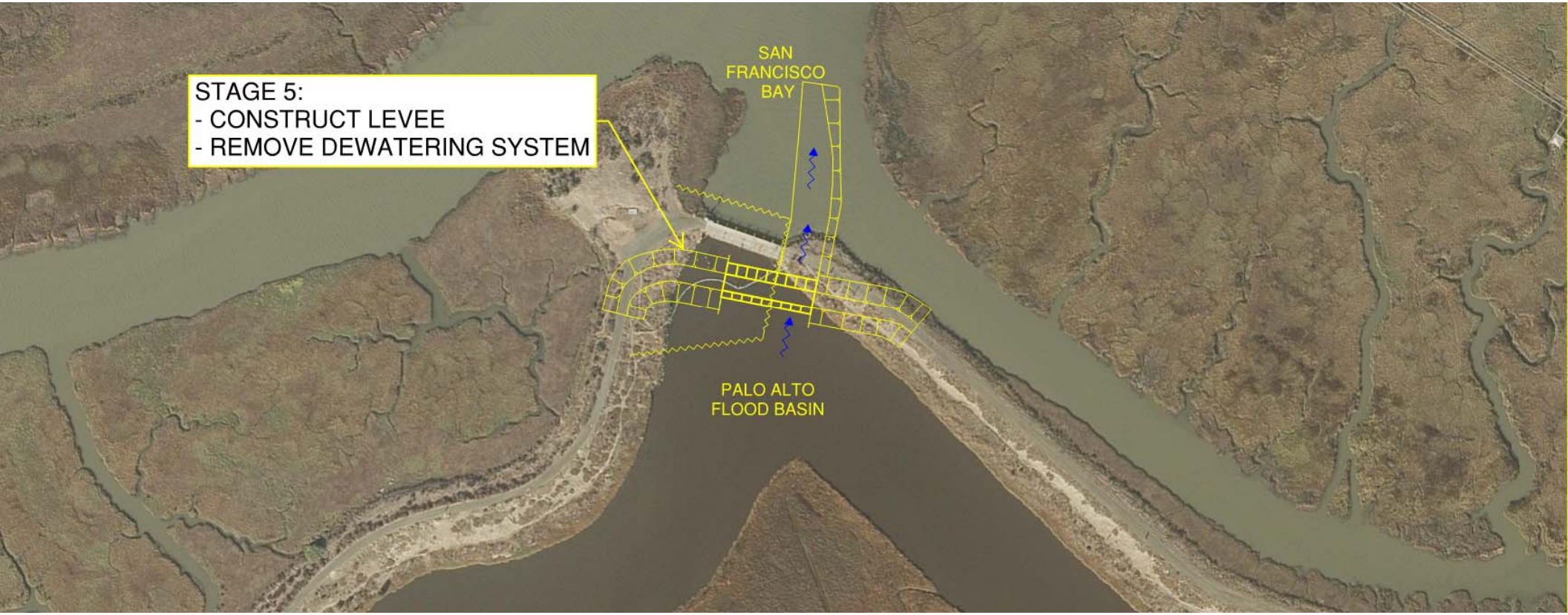
Alternative B: Stage 1 and Stage 2



Alternative B: Stage 3 and Stage 4



Alternative B: Stage 5



Valley Water

Alternative B: Pros and Cons

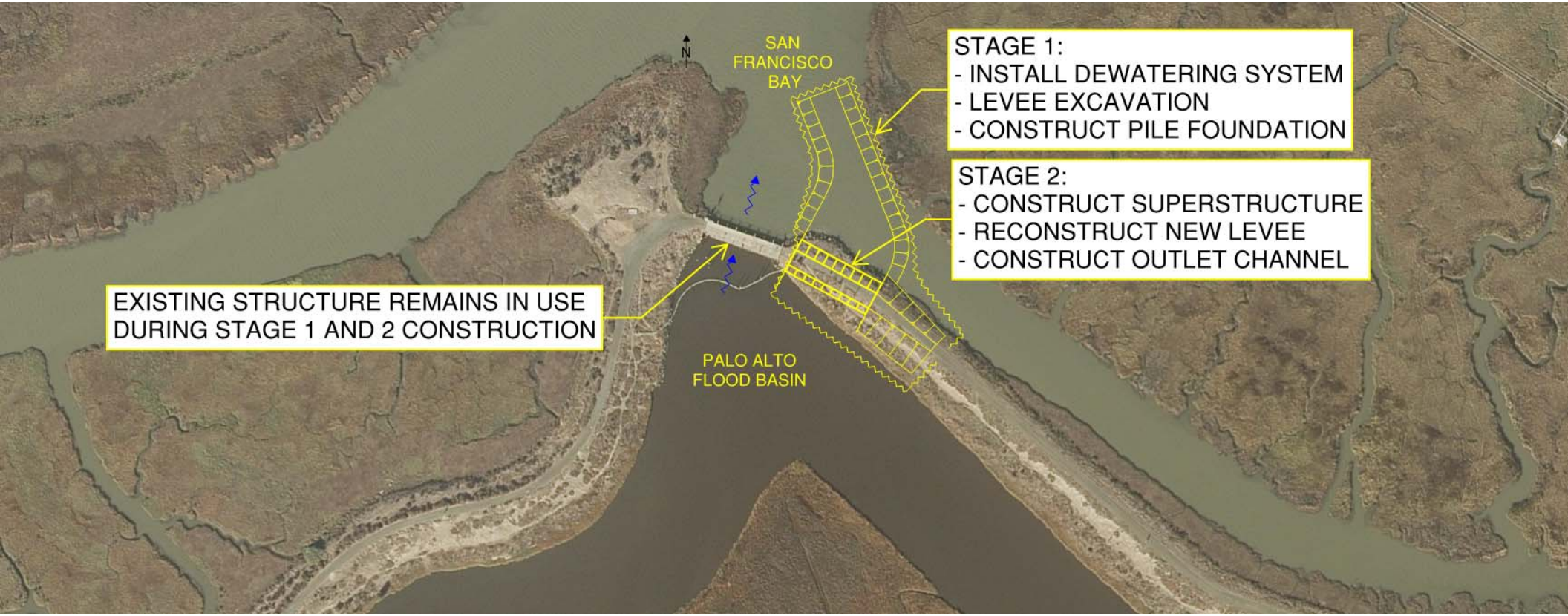
Pros:

- Maintains existing structure flow direction
- Minimizes excavation for outlet channel

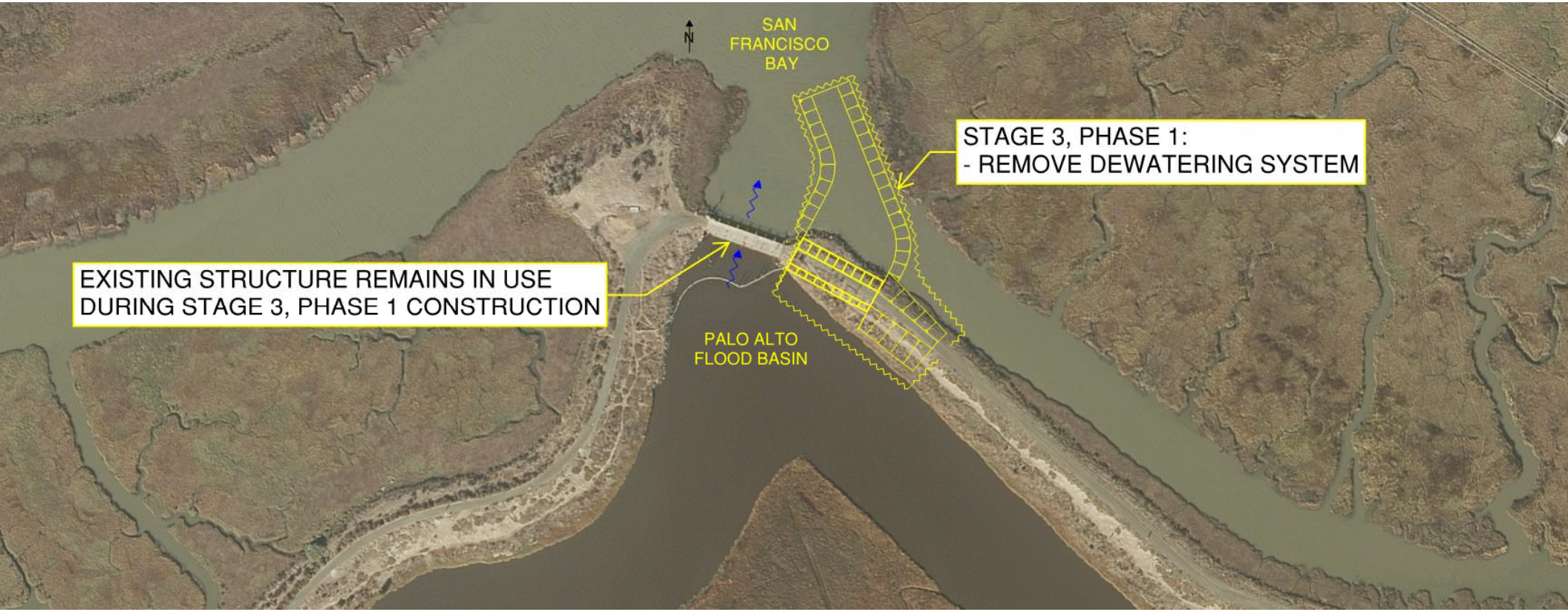
Cons:

- Longer Construction: 5 years instead of 4 years (Alt-C)
  - Assumed greater environmental impacts compared to Alt-C
  - Longer closure of trail: 53 months instead of 41 months (Alt-C)
- Staged construction and increased risk of construction complications
- Higher cost

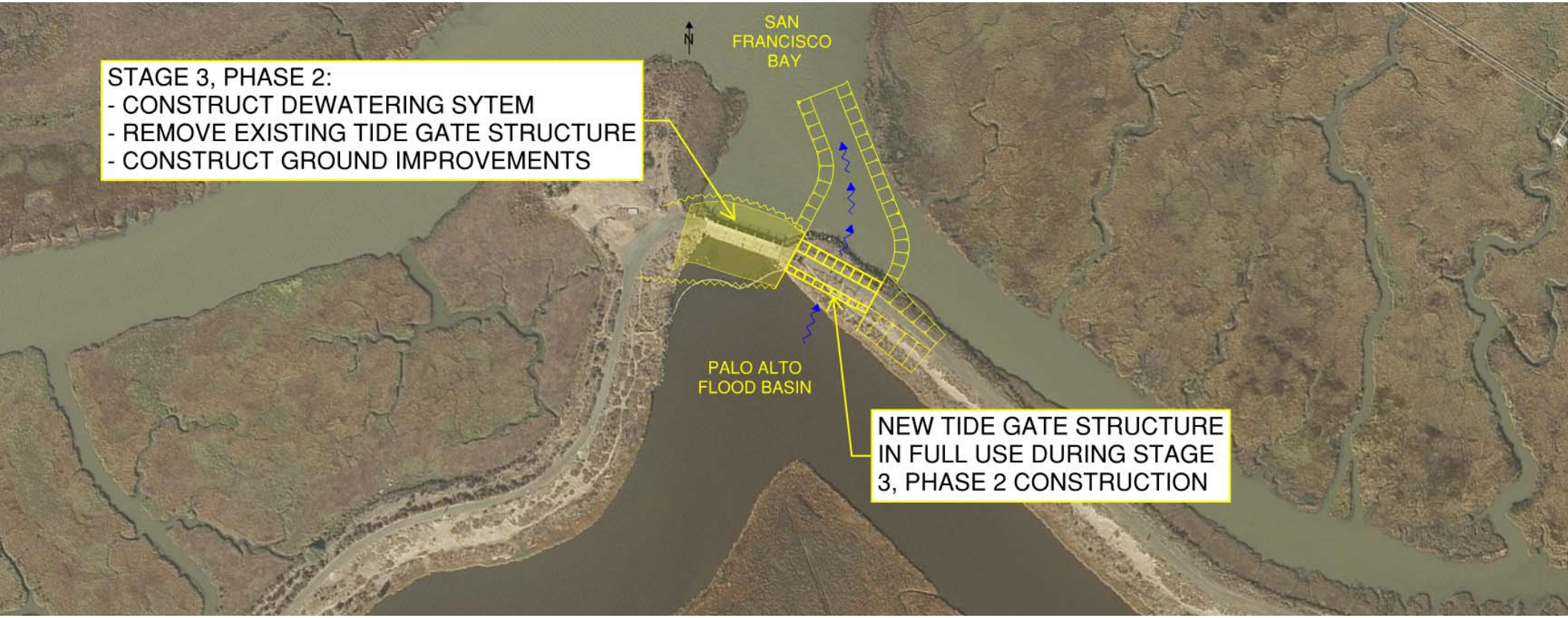
Alternative C: Stage 1 and Stage 2



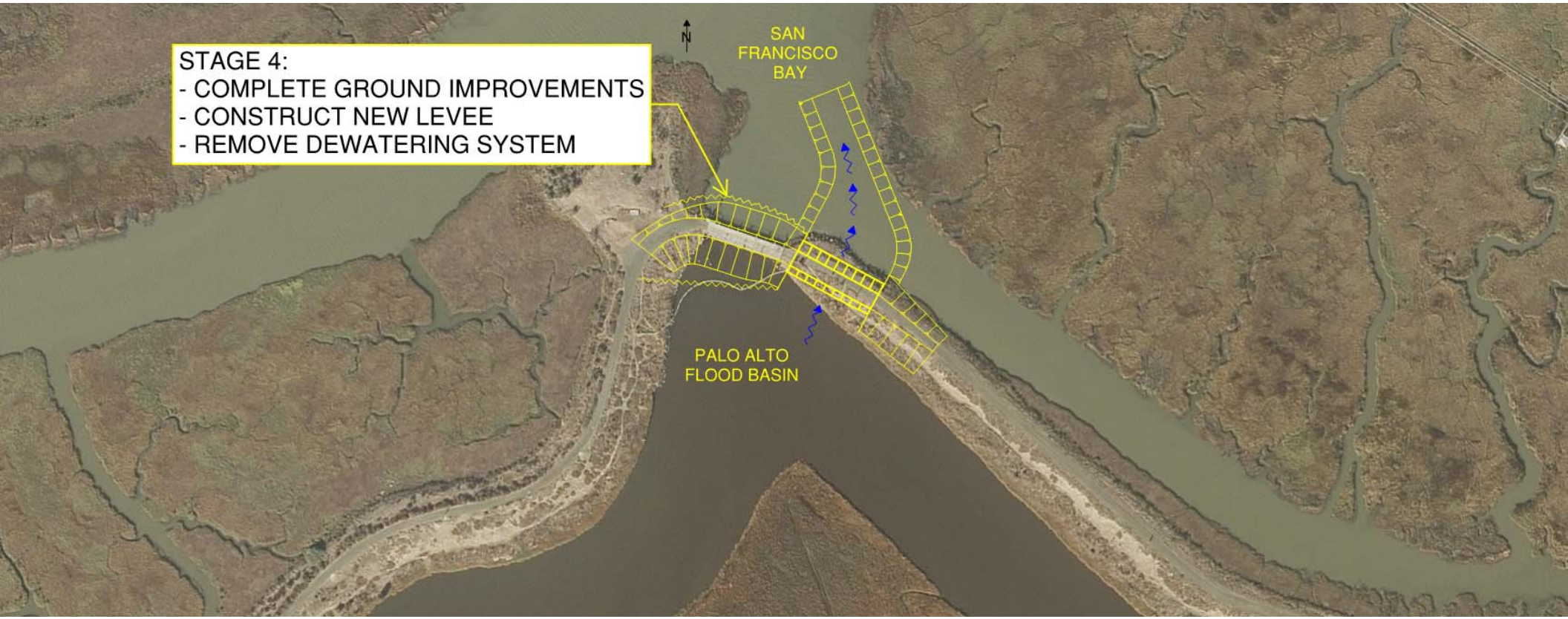
Alternative C: Stage 3, Phase 1



Alternative C: Stage 3, Phase 2



Alternative C: Stage 4



Valley Water

Alternative C: Pros and Cons

Pros:

- Faster Construction: 4 Seasons instead of 5 (Alt-B)
  - Assumed less environmental impacts compared to Alt-B
  - Shorter trail closure duration 41 months instead of 53 months (Alt-B)
- More straightforward construction
- Lower cost construction compared to Alt-B
- **Cons:**
- Additional excavation in the bay to create outlet channel

Alternatives Construction Cost

Alternative B: Approximately $37 Million (5 Seasons)

Alternative C: Approximately $31.8 Million (4 Seasons)

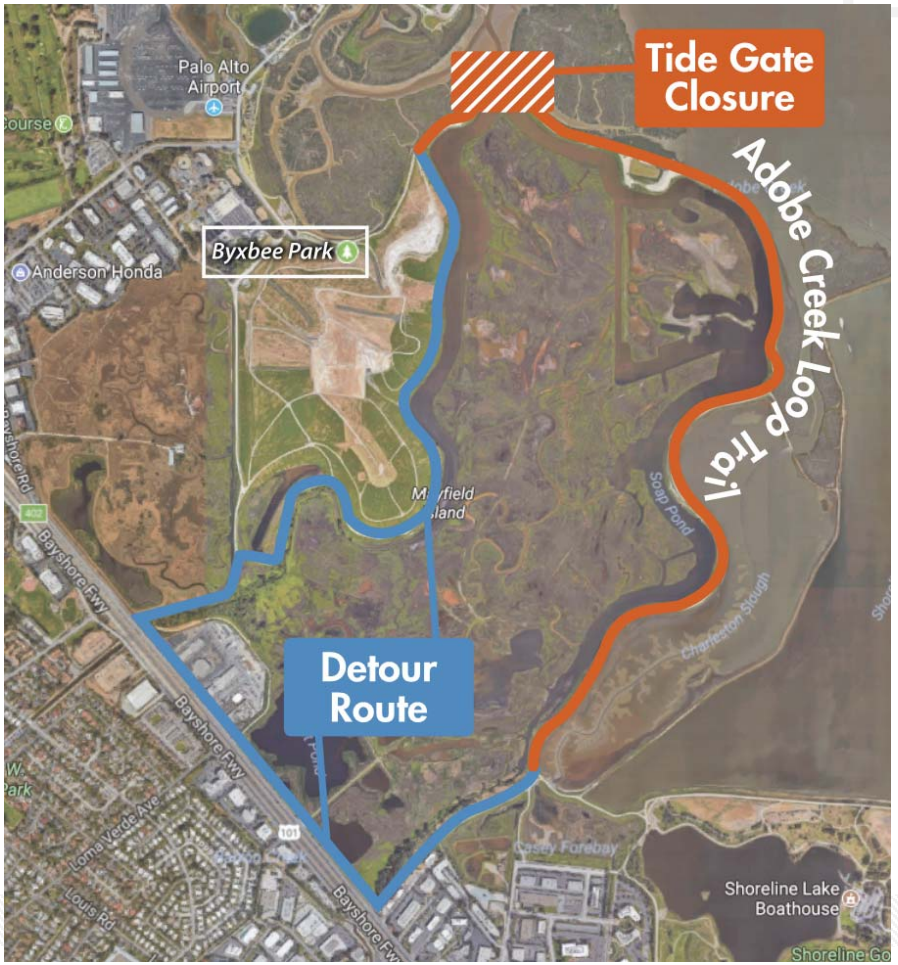
Proposed Trail Closure and Detour

- Alternative B:

  Trail closed for 53 months.

- Alternative C:

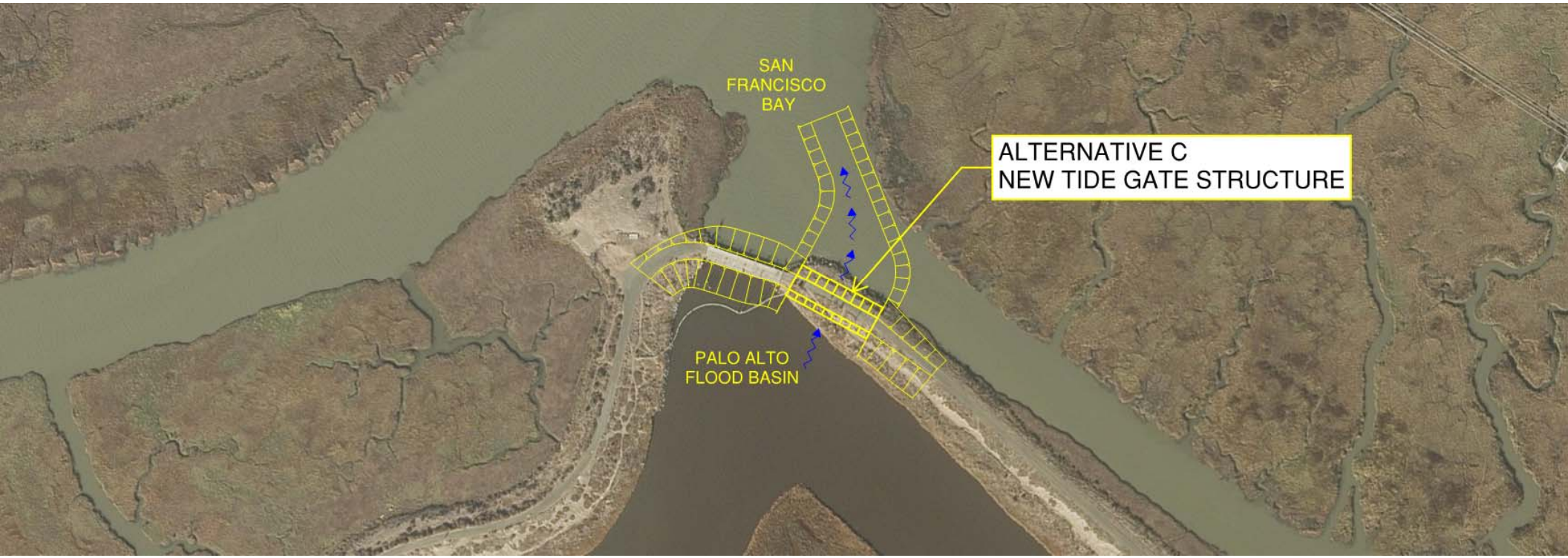
  Trail closed for 41 months.



valleywater.org

Recommended Alternative

Alternative C: Construct next to existing tide gates



Public Outreach

- Project website (November 2019)
- Planning study level public meeting (February 2020)
- Pre-construction public meeting notice (July 2021)
- Pre-construction public meeting (August 2021)

Project Schedule

- Problem Definition Report: August 2019
- Draft Planning Study Report: November 2019
- 30% Design: Sept. 2019 – March 2020
- 60% Design: March 2020 – September 2020
- 90% Design: September 2020 – Dec. 2020
- 100% Design: Dec. 2020 – March 2021
- Environmental (CEQA/Permitting): Jan. 2019 – March 2021
- Advertise/Award Contract: June 2021 – August 2021
- Construction Schedule (Alt-C): Sept. 2021 – Jan. 2025

QUESTIONS

Santa Clara Valley Water District

File No.: 19-1081

Agenda Date: 11/18/2019
Item No.: 4.2.

COMMITTEE AGENDA MEMORANDUM

Capital Improvement Program Committee

SUBJECT:
Capital Project Monitoring - Construction.

RECOMMENDATION:
Receive and discuss information regarding the status of capital projects in the construction phase.

SUMMARY:
The CIP Committee's 2019 Workplan includes monitoring of capital projects during all phases of development. To meet these requirements, staff prepares a list of active projects for the Committee each month to provide detailed information on those where potential and/or significant issues have been identified. The projects presented for discussion will be organized by phases: planning/feasibility; design; and construction. Staff will present projects to the CIP Committee for review one phase at a time. Projects currently under construction are being presented this month.

Attachment 1 is a list of projects in the construction phase. A verbal report will be provided at the meeting with more detailed information about recent developments on projects.

ATTACHMENTS:
Attachment 1: Capital Project Monitoring Report - Construction

UNCLASSIFIED MANAGER:
Tim Bramer, 408-630-3794
Ngoc Nguyen, 408-630-2632
Michael Cook, 408-630-2424

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Capital Project Monitoring Report - November 2019

CM Services

Construction Phase

Row	Project No.	Project Name	Notes, Upcoming Board Actions or potential issues	In house	External
	Water Utility				
1	91234011	Coyote Warehouse	Excavation and foundation preparation underway. Completion of civil work expected by September 2020.	X	
2	26564001	Main and Madrone Pipelines Restoration	Notice of completion scheduled to go to Board of Directors on November 26, 2019.		X
3	93294057	RWTP Reliability Improvement	Phase 2 (of 5) completion is currently anticipated in June 2020.		X
4	93294057	RWTP Oak Woodland Project (Small Capital Project)	Board awarded contract on October 22, 2019. Fieldwork to commence in late November.	X	
5	92764009	Vasona Pump Station Fence and Gate Replacement (Small Capital Project)	Contract scheduled to be awarded by the Board on November 26, 2019.	X	
6	95084002	10-Yr Pipeline Inspection & Rehabilitation (Cross Valley and Calero Pipeline)	Preparation work underway. Pipeline shutdown scheduled to begin November 19, 2019 and continue through February 28, 2020.	X	
	Flood Protection				
7	26154002	Upper Guadalupe River Reach 6	A project to install gravel for fish habitat in a portion of Reach 6 is anticipated to begin and complete in summer, 2020.	X	
8	26244001	Permanente Creek, SF Bay to Foothill Expressway	Construction of Channel work was completed in January, 2019; Construction of McKelvey Park was completed in September 2019 and the Contractor is working on items on the deficiency list; Consultation with SHPO & USACE on cultural resources was completed on June 19, 2019; Construction of Rancho San Antonio Park Flood Detention Basin is expected to be completed in May 2020.	Rancho San Antonio	McKelvey Park
9	26174041s	Berryessa Ck, Calaveras-I-680	COE- civil construction completed June 2018; mitigation planting completed in January 2019; USACE is addressing items on the deficiency list.	N/A	
10	26174051 26174052	Upper Llagas Creek Flood Protection Project, Phase I	Board awarded contract for Phase 1, Reaches 4 and 7a on July 23, 2019. Civil work scheduled to be completed in 2021.	X	
11	40174005	Berryessa Creek, Lwr Penitencia Ck to Calaveras Blvd, Phase 2	Flood protection improvements completed October 2019; Contractor is working on items on the deficiency list and will begin mitigation planning in November. Lower Calera Creek set to be advertised for construction in the Spring of 2020.		X
12	40264008s	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	Civil construction complete, plant establishment to 2020.	X	
13	40264011	Cunningham Flood Detention Certification	Construction work completed in October, 2019.	X	
14	62084001	Uvas Creek Levee Rehabilitation (WARP)	Phase I: Completed in June 2019. Phase II: Construction completed in October, 2019.		X
15	62084001	San Tomas Aquino Creek and Barron Creek Repair Project (WARP)	Construction was completed in October 2019.	X	
	Water Resources Stewardship				
		No projects at this time.			
	Buildings & IT				
16	73274011	E-Discovery Management System	Project ahead of schedule; implementation complete; Currently completing training for Legal and Library/Records teams.	N/A	N/A

Construction Phase

Row	Project No.	Project Name	Notes, Upcoming Board Actions or potential issues	In house	External
17	73274007	Vena Upgrade	Staff continues to leverage construction agreement only for post go-live support, documentation and other minor configuration changes; Project to complete by end of calendar year.	N/A	N/A
18	73274002	PeopleSoft System Upgrade and ERP System Implementation	Full project kickoff was completed 10/30 with Infor staff working on project 40/hrs per week. Project team is currently undergoing product training and initial Business Process Engineering sessions. Phase 1 project staff are expected to move to Santa Teresa Building November, 2019. Technology Foundation, Purchasing, Global Ledger, Requisitioning, Allocations, Payables, Inventory Control, Grants, Contracts, Cash management are all in the design phase. Project expected to continue through 2021.	N/A	N/A

File No.: 19-1077

Agenda Date: 11/18/2019
Item No.: 4.3.

COMMITTEE AGENDA MEMORANDUM

Capital Improvement Program Committee

SUBJECT:
Amendment to Consultant Agreement A3933A with Harris and Associates to Provide additional $350,000 for Construction Management Services for the Permanente Creek Flood Protection Project - McKelvey Park Detention Basin (Project No. 26244001) (Mountain View) (District 7)

RECOMMENDATION:
Receive information on upcoming Amendment to Consultant Agreement A3933A with Harris and Associates for Construction Management Services for the Permanente Flood Protection Project - McKelvey Park Detention Basin that staff will be recommending for Board approval.

SUMMARY:
Harris and Associates (Consultant) is performing construction management services for the Permanente Creek Flood Protection Project being constructed at McKelvey Park in the City of Mountain View. The overall Permanente Project protects approximately 2,200 parcels by implementing flood detention and channel improvement elements. Construction of flood protection improvements at McKelvey Park began in November 2016 and staff had originally anticipated construction to be completed in February 2019. Due to unforeseen circumstances, including delay caused by PG&E's relocation of its overhead electrical lines, additional City of Mountain View permit requirements and inspections, and tight dimensions at the Project site, construction completion was revised to July 2019. As of end of October 2019, construction activities have been completed. City of Mountain View, Santa Clara Valley Water District (Valley Water) and the contractor are currently performing inspections and the contractor is addressing any items needing additional work. It is now anticipated that Project construction will be completed in December 2019.

There are outstanding claims from the construction contractor that will require additional time to evaluate and resolve before Valley Water can close out the construction contract. Additional construction management services and an extension of the Agreement term are needed for the Consultant to continue managing construction activities and to assist Valley Water in resolving outstanding claims from the construction contractor.

Consultant Agreements

On January 26, 2016, the Board of Directors (Board) approved the original Agreement with the Consultant to perform the construction administration, construction management, and inspection-related services for the construction of the McKelvey Park Detention for a "not-to-exceed" (NTE)

amount of $2,769,851. On February 27, 2018, the Board approved Amendment No. 1 to the Agreement to provide for additional construction management services, increase the compensation NTE by $533,170, and extend the Agreement terms. On March 26, 2019, the Board approved Amendment No. 2 to provide additional construction management services and increase the NTE by $596,500.

Amendment No. 3 is now recommended to extend the term of the Agreement and to provide additional compensation for the Consultant to perform the following additional services:

1) Additional construction management and inspection work to address outstanding items of work.
2) Coordinate the final acceptance process with all agencies and departments such as the City of Mountain View's approval must be obtained from Public Works, Park and Recreation, Planning, Environmental, Building, and Fire Protection Departments.
3) Extensive schedule analysis and claims management for disputed costs, including approximately 50 change order proposals and 10 potential claims.
4) Prepare for Dispute Resolution Board meetings and possible formal hearings/presentations to resolve disputed potential claims.
5) Project close-out for all documents, including approximately 50 more submittals.

As of September 28, 2019, there is approximately $190,000 remaining in this consultant Agreement. The recommendation is to increase the NTE of the agreement by $350,000 from $3,899,521 to $4,249,521 and to extend the term for approximately another year.

Additional Construction Management Services

The McKelvey site is located close to urban downtown Mountain View and involves the rebuilding of the City's little league field in the detention basin. Extensive coordination has been required with multiple departments within City government, the utility company providers, and neighbors residing close to the Project. Those challenges have resulted in the unanticipated expansion of the Consultant's scope and costs, which required additional investigations between the Consultant, Valley Water, Design Consultant, Construction Contractor, and Special Inspection Firms.

The complexity of the Project is also reflected in the number of substantive submittals, requests-for-information (RFIs), and change order proposals. To date, the Consultant has managed over 600 submittals and over 450 RFIs. In addition, there have been 150 change order proposals that have been or are in the process of being evaluated and negotiated. The change order proposals have the potential to add up to $8 to $10 million in claims.

Staff recommends an additional $150,000 for Task 1 (Construction Administration), $50,000 for Task 3 (Inspections, Special, and Specialty Inspections), and $150,000 for Task 4 (Supplemental Tasks - Claims Management).

ATTACHMENTS:
None

UNCLASSIFIED MANAGER:
Ngoc Nguyen, 408-630-2632

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Santa Clara Valley Water District

File No.: 19-1082

Agenda Date: 11/18/2019
Item No.: *4.4.

COMMITTEE AGENDA MEMORANDUM

Capital Improvement Program Committee

SUBJECT:
Safe, Clean Water and Natural Flood Protection Program Flood Protection Projects Funding Scenario Discussion.

RECOMMENDATION:

A. Receive project updates on the following Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) Flood Protection Projects:
    a. Coyote Creek
    b. Upper Penitencia Creek
    c. Upper Llagas Creek
    d. Upper Guadalupe River
B. Review potential funding scenarios, provide feedback as necessary; and
C. Determine recommendation to full Board.

SUMMARY:
The purpose of this agenda item is for the Committee to receive updates on the following Safe, Clean Water Program Flood Protection Projects:

a. Coyote Creek (Attachment 1)
b. Upper Penitencia Creek (Attachment 2)
c. Upper Llagas Creek (Attachment 3)
d. Upper Guadalupe River (Attachment 4)

After receiving the project updates, the Committee will then review the potential funding scenarios (Attachment 5), provide direction as necessary, and determine whether to make a recommendation to the full Board regarding whether to proceed with any of the scenarios presented or an alternative scenario to be recommended by the Committee. Depending on the recommended scenario, if approved by the Board it may require that the Board set the time and place for a formal public hearing to modify one or more of the projects listed above.

Staff will prepare a Supplemental Committee Agenda Memo to provide additional information not available at the time of the publishing of this agenda in order to incorporate the materials to be prepared for the Coyote Creek Flood Protection Projects upcoming public meetings.

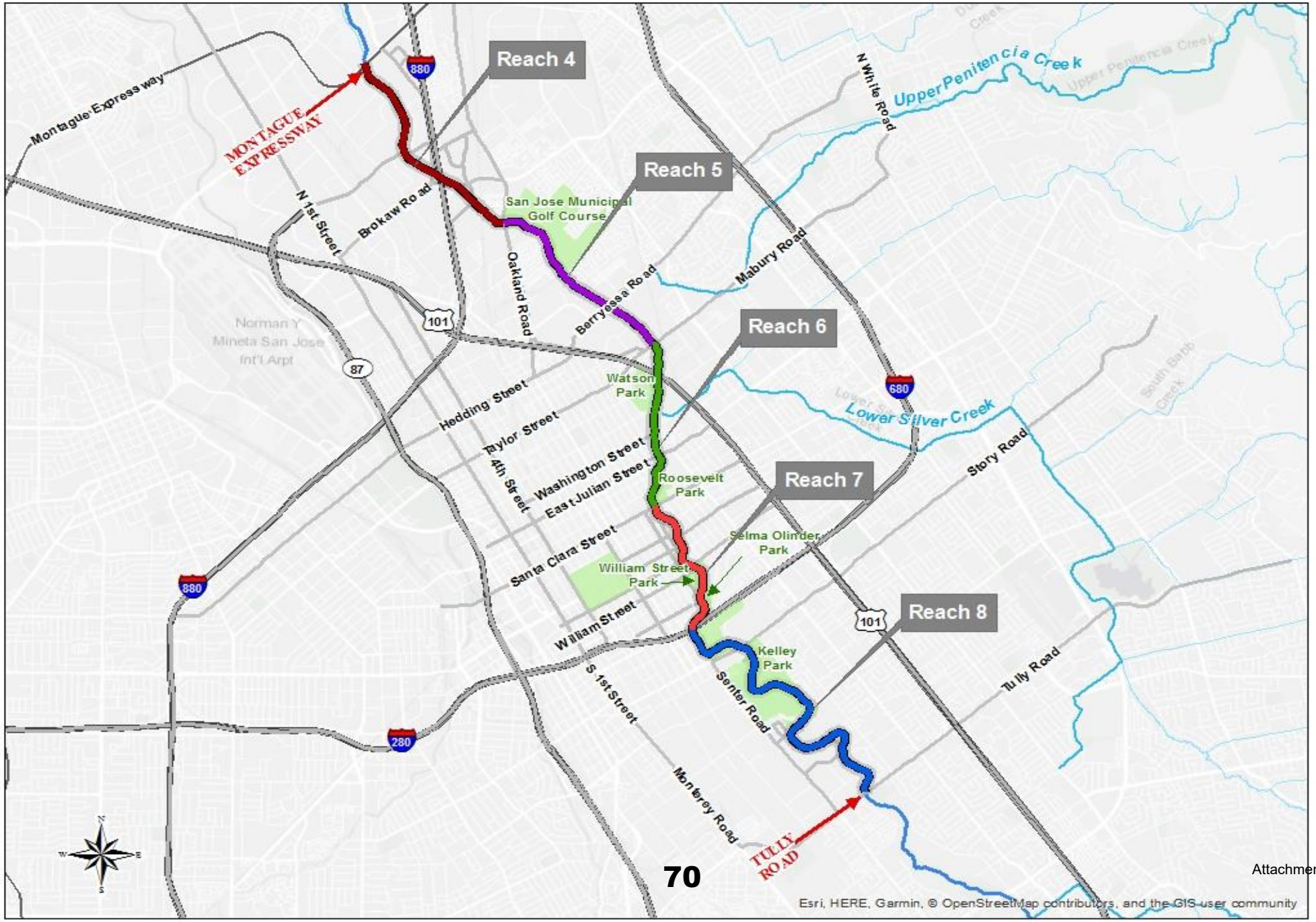
ATTACHMENTS:

Attachment 1: Coyote Creek Update
Attachment 2: Upper Penitencia Creek Update
Attachment 3: Upper Llagas Creek Update
Attachment 4: Upper Guadalupe River Update
Attachment 5: Potential Funding Scenarios
*Supplemental Committee Agenda Memo
*Supplemental Attachment 1

UNCLASSIFIED MANAGER:
Melanie Richardson, 408-630-2035
Nina Hawk, 408-630-2736

Coyote Creek Flood Protection Project Update

Conceptual/Feasible Project Alternatives


Reach 4
Reach 5
Reach 6
Reach 7
Reach 8
MONTAGUE EXPRESSWAY
Montague Expressway
N 1st Street
Brokaw Road
Oakland Road
Berryessa Road
Mabury Road
N White Road
Upper Penitencia Creek
San Jose Municipal Golf Course
Norman Y Mineta San Jose Int'l Arpt
Watson Park
Roosevelt Park
Selma Olinder Park
William Street Park
Kelley Park
Hedding Street
Taylor Street
4th Street
Washington Street
East Julian Street
Santa Clara Street
William Street
S 1st Street
Monterey Road
Senter Road
Lower Silver Creek
Story Road
Tully Road
TULLY ROAD
880
101
87
680
280
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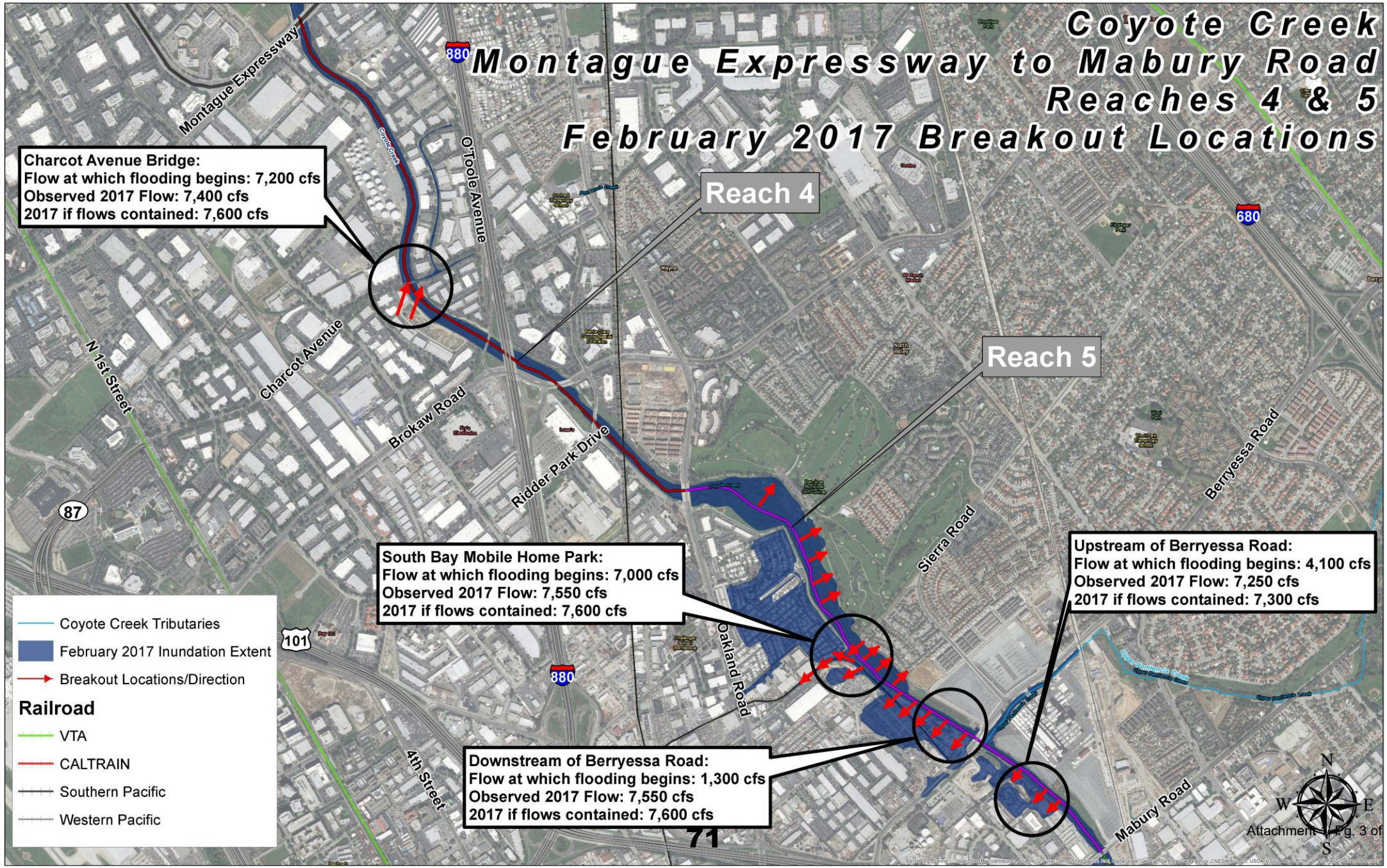
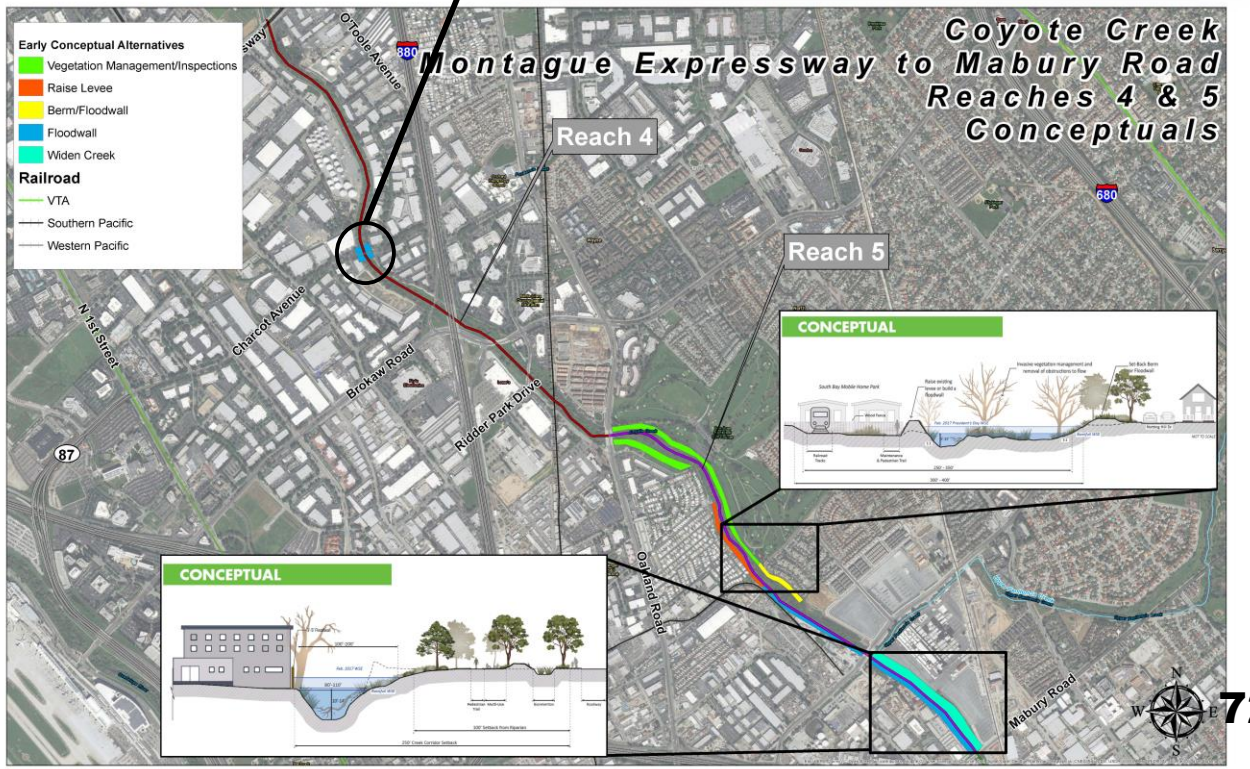
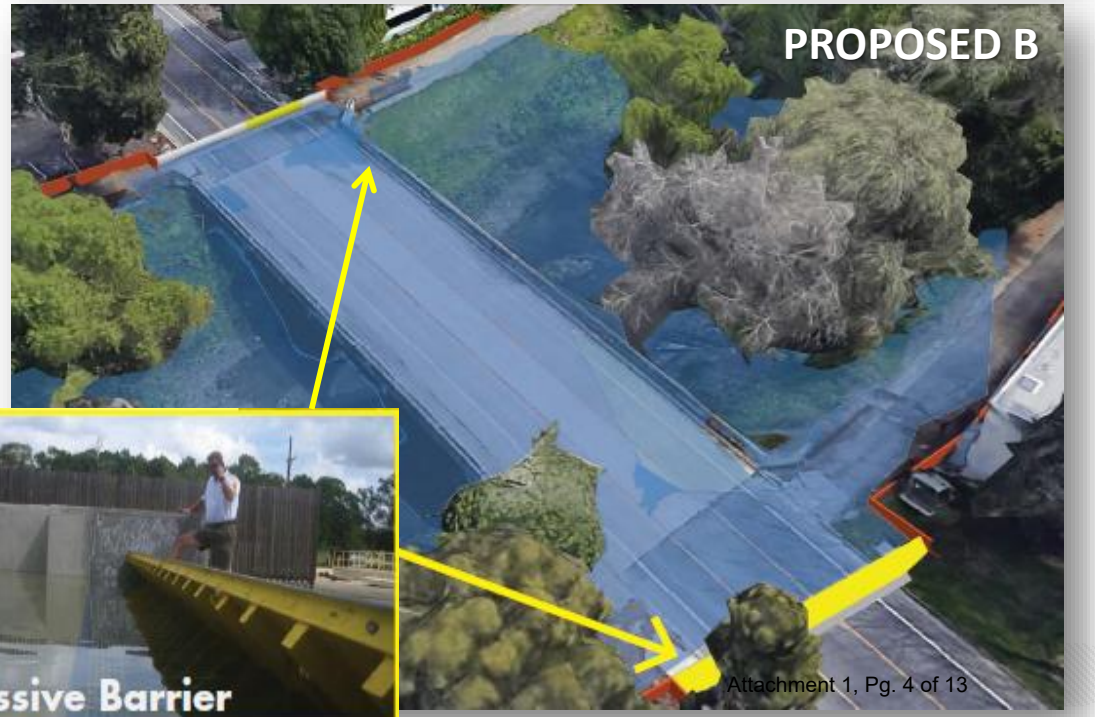

Coyote Creek
Montague Expressway to Mabury Road
Reaches 4 & 5
February 2017 Breakout Locations
Charcot Avenue Bridge:
Flow at which flooding begins: 7,200 cfs
Observed 2017 Flow: 7,400 cfs
2017 if flows contained: 7,600 cfs
Reach 4
Reach 5
South Bay Mobile Home Park:
Flow at which flooding begins: 7,000 cfs
Observed 2017 Flow: 7,550 cfs
2017 if flows contained: 7,600 cfs
Upstream of Berryessa Road:
Flow at which flooding begins: 4,100 cfs
Observed 2017 Flow: 7,250 cfs
2017 if flows contained: 7,300 cfs
Downstream of Berryessa Road:
Flow at which flooding begins: 1,300 cfs
Observed 2017 Flow: 7,550 cfs
2017 if flows contained: 7,600 cfs
Coyote Creek Tributaries
February 2017 Inundation Extent
Breakout Locations/Direction
Railroad
VTA
CALTRAIN
Southern Pacific
Western Pacific
Montague Expressway
O'Toole Avenue
Charcot Avenue
N 1st Street
Brokaw Road
Ridder Park Drive
Sierra Road
Berryessa Road
Oakland Road
4th Street
Mabury Road
880
680
87
101
71
N
S
E
W
Miles

Reach 4 - Charcot Avenue Bridge

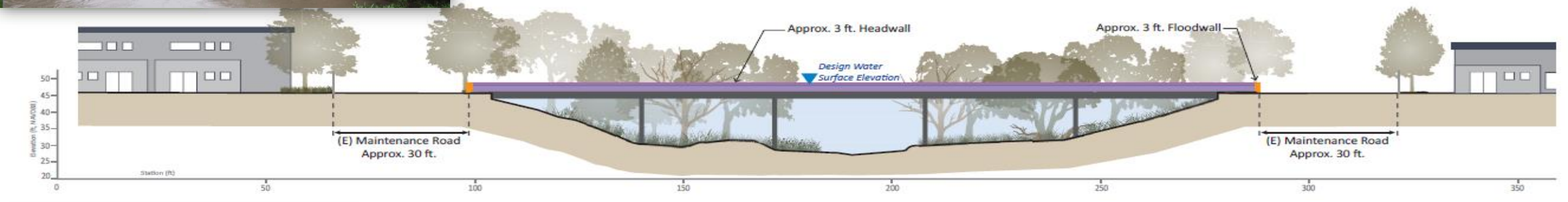
CONCEPTUAL



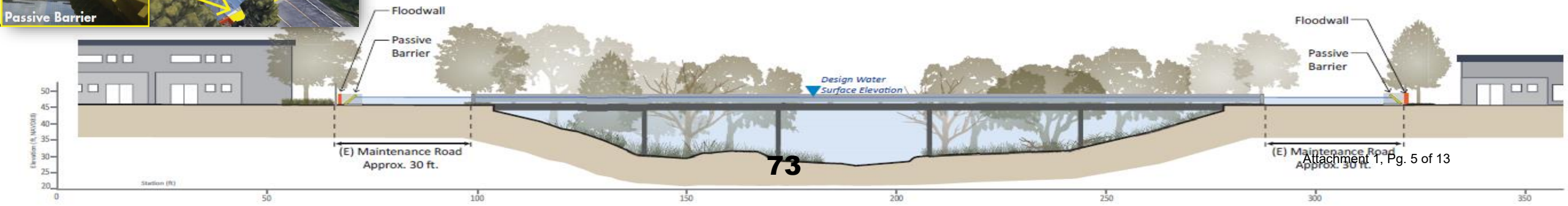
FEASIBLE




Floodwall
Headwall
PROPOSED A


Approx. 3 ft. Headwall
Approx. 3 ft. Floodwall
Design Water Surface Elevation
(E) Maintenance Road Approx. 30 ft.
(E) Maintenance Road Approx. 30 ft.
Station (ft)


PROPOSED B
Passive Barrier


Floodwall
Passive Barrier
Floodwall
Passive Barrier
Design Water Surface Elevation
(E) Maintenance Road Approx. 30 ft.
(E) Maintenance Road Approx. 30 ft.
Station (ft)

$ 4 M*

- Floodwalls
- Passive barrier

$ 16 M*

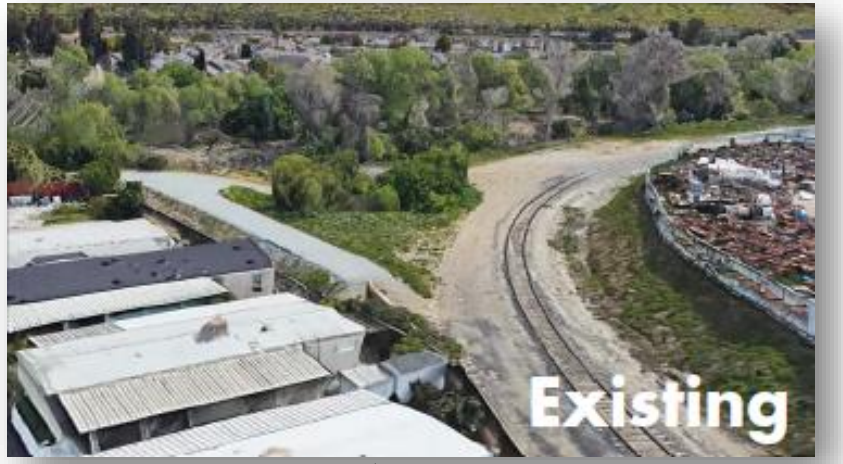
- Rebuild existing levee[a]
- Floodwalls
- Bridge headwall + bridge retrofit[b]

*Rough Order of Magnitude estimate, includes Montague Expressway to Old Oakland Road work (Reach 4)

[a]Geotech study in progress

[b]Retrofit work needs are being explored

Reach 5 - Mobile Home Park



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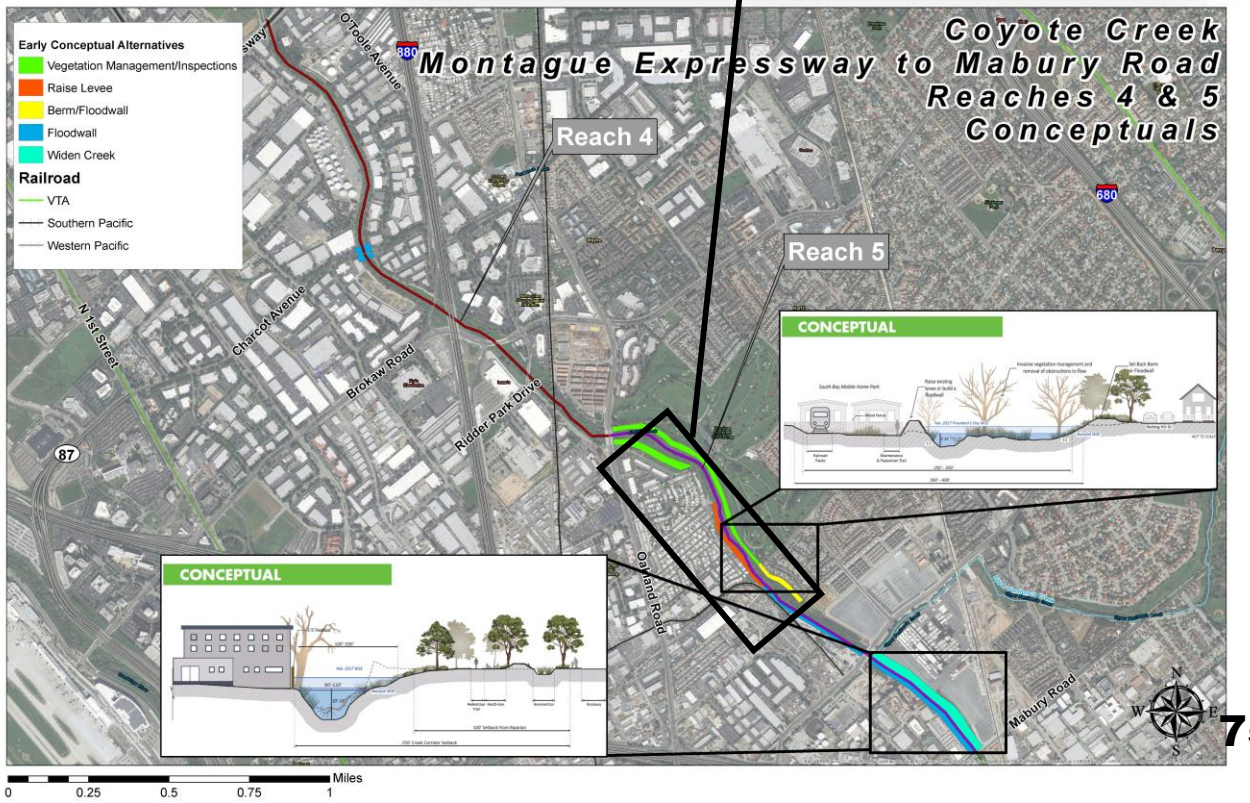
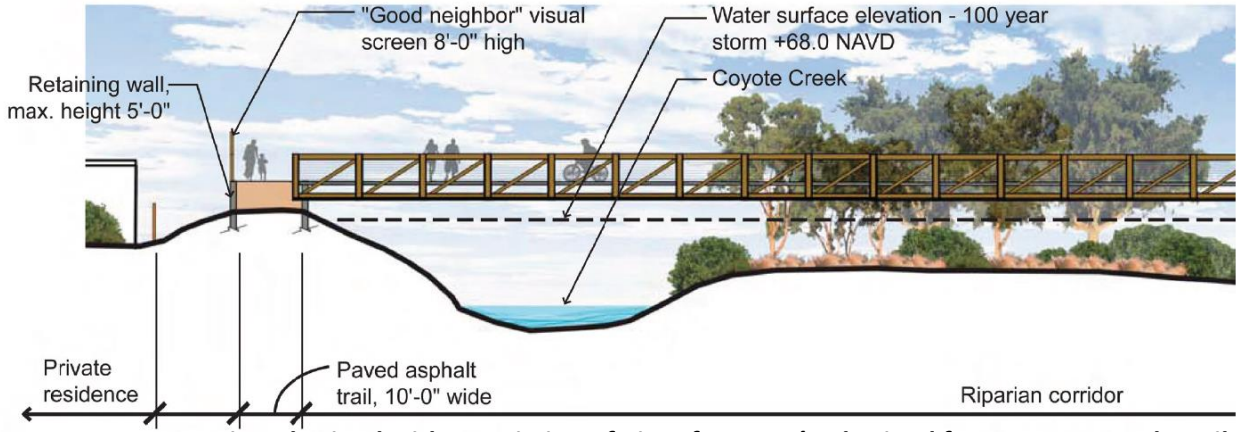
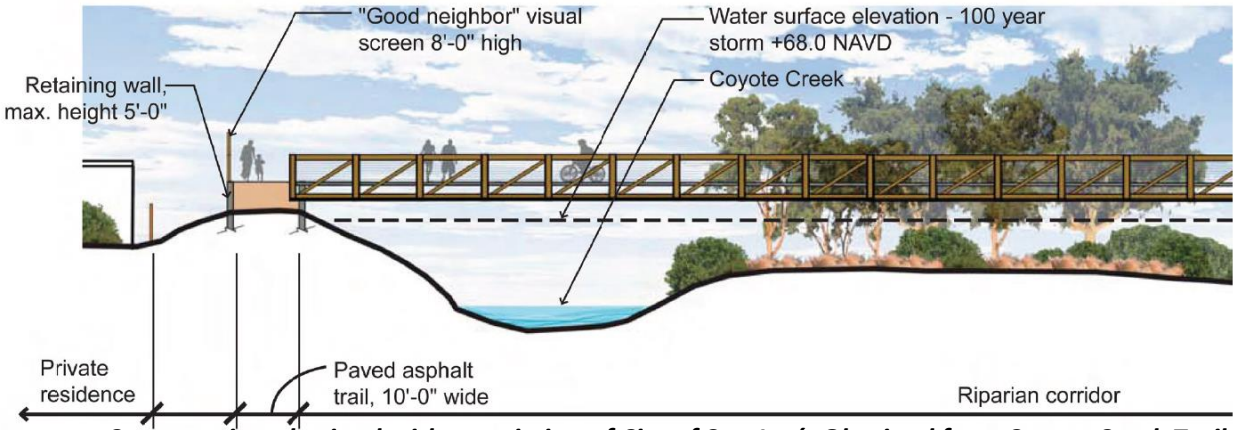
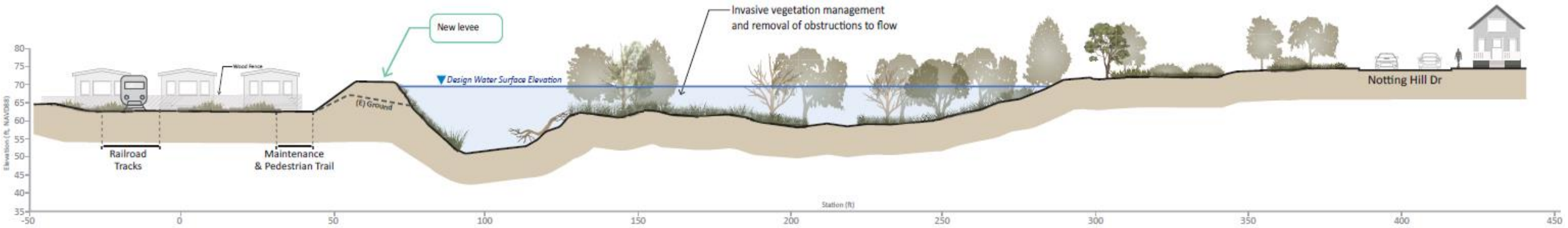




Cross-section obtained with permission of City of San José. Obtained from Coyote Creek Trail Master Plan, Montague to Watson Park, September 2011

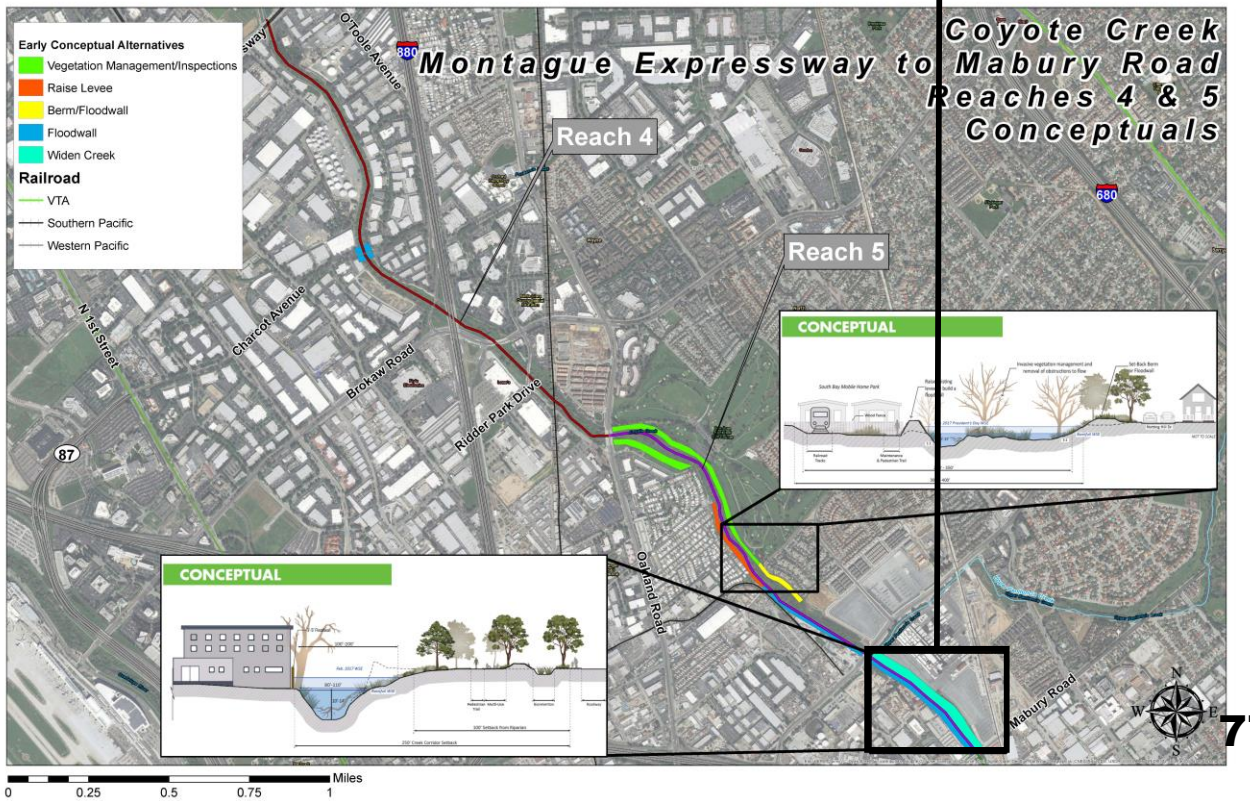


Cross-section obtained with permission of City of San José. Obtained from Coyote Creek Trail Master Plan, Montague to Watson Park, September 2011



Reach 5 – San José Flea Market

CONCEPTUAL



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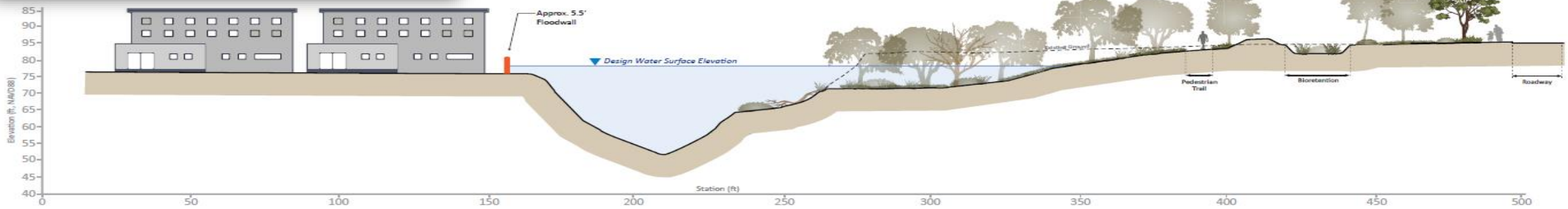
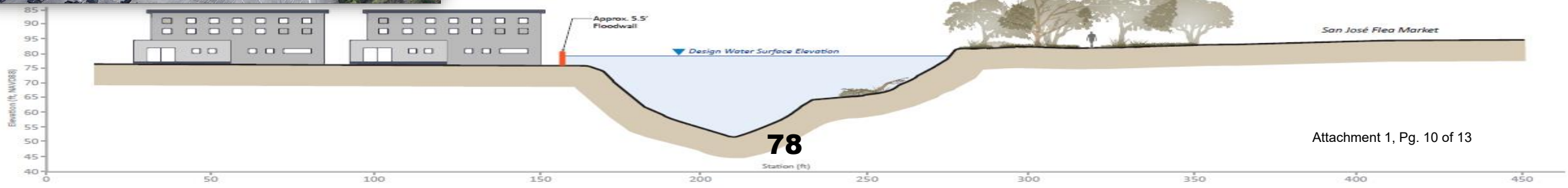
PROPOSED A


Approx. 5.5' Floodwall
Design Water Surface Elevation
Pedestrian Trail
Bioretention
Roadway
Elevation (ft, NAVD88)
Station (ft)


BART
Floodwall
San José Flea Market
PROPOSED B


Approx. 5.5' Floodwall
Design Water Surface Elevation
San José Flea Market
Elevation (ft, NAVD88)
Station (ft)

$ 7 M*

- New levee at mobile home park
- Floodwalls

$ 22 M*

- Rebuild existing levee[a]
- New levee at mobile home park
- Floodwalls
- Creek widening at BBUV

*Rough Order of Magnitude estimate, includes Old Oakland Road to Mabury Road work (Reach 5)

[a]Geotech study in process

Feasible Rough Order of Magnitude Cost Estimate for entire Project

$ 40 M*

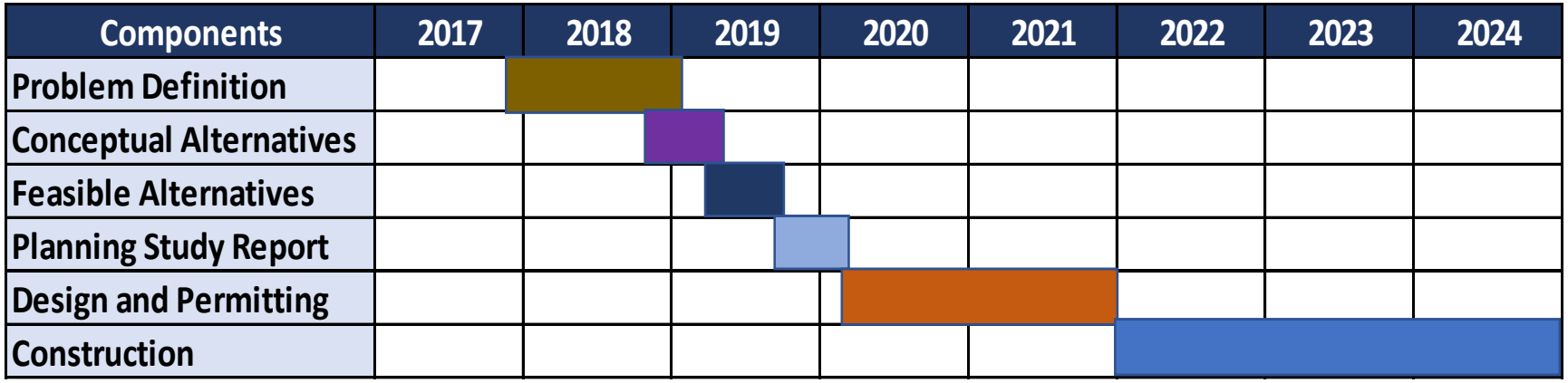
- Reach 4: 4 M
- Reach 5: 7 M
- Reach 6: 8 M
- Reach 7: 15 M
- Reach 8: 4 M

$ 85 M*

- Reach 4: 16 M
- Reach 5: 22 M
- Reach 6: 15 M
- Reach 7: 22 M
- Reach 8: 10 M

Project Components, Status and Timeline

Expedited Project Timeline: Assumes project alternative selected for implementation does not require extensive permitting



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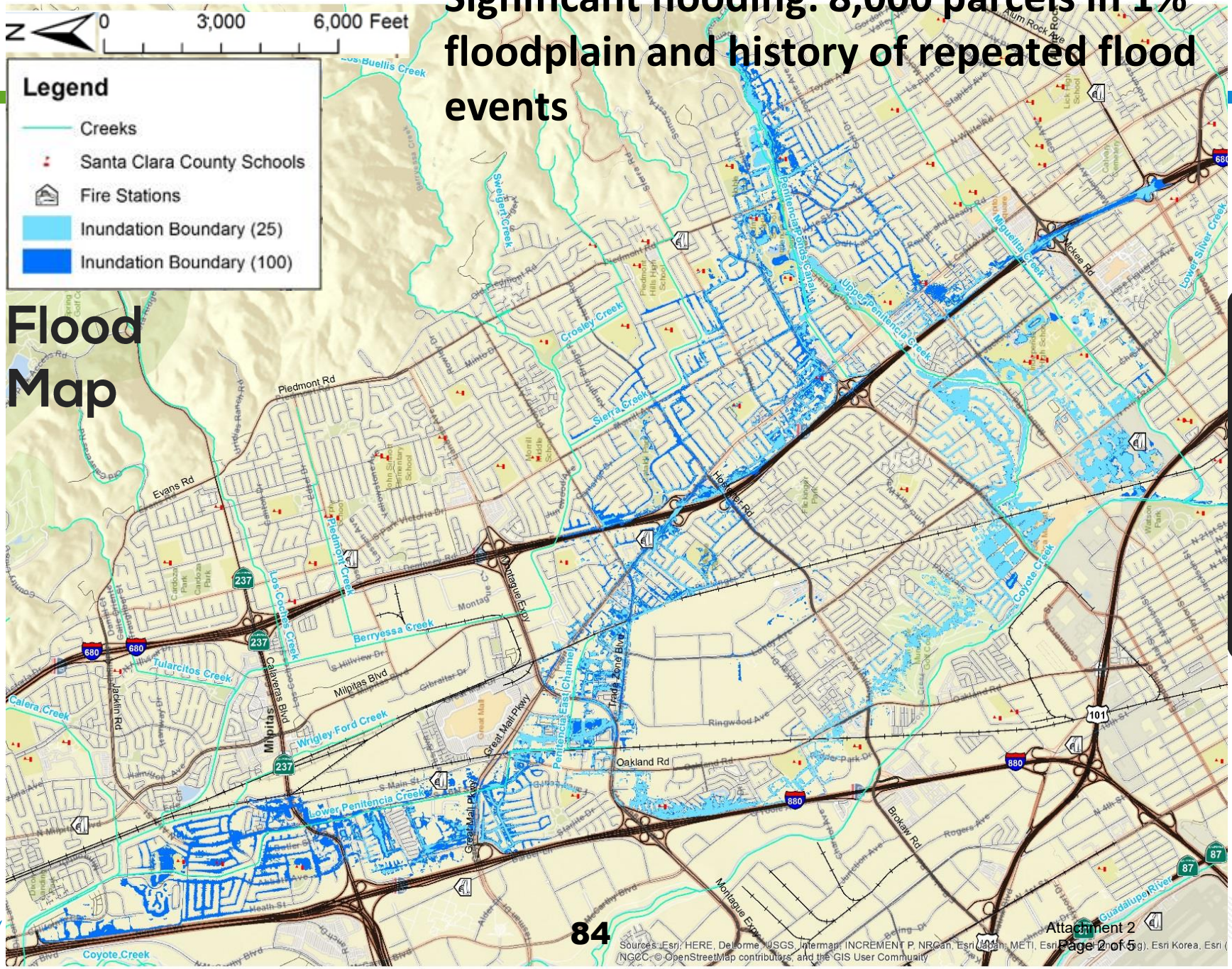
Upper Penitencia Creek Flood Protection Project

Reduce Flood Risk, Preserve Water Supply, and Enhance Recreation & Creek Habitat Benefits

Significant flooding: 8,000 parcels in 1% floodplain and history of repeated flood events



valleywater.org

Upper Penitencia Creek Project

- **Flood protection, ecological restoration, recreation enhancement, water supply preservation**
- **Project SCW KPIs:**
  1. **With federal and local funding: construct a flood protection project to provide 1 percent flood protection to 5,000 homes, businesses and public buildings**
  2. **With local funding only: Acquire all necessary rights-of-way and construct a 1 percent flood protection project from Coyote Creek confluence to King Road.**
- **Remaining SCW allocation for Upper Penitencia Creek Project design/construction: $42 million**

valleywater.org

Upper Penitencia Creek Project

- Combination of Landscape Vision concepts developed through SFEI led stakeholder process
  - In-Channel work – widen, restore, setback levees
  - Off-Channel work – flood detention
  - Other: limited floodwalls, bypasses
- City/County Tri-Party Collaboration – Public Land
- Public Input solicited through planning process
- <u>Key Constraint – Cannot increase flows D/S to Coyote Creek</u>

valleywater.org

Recommended Project

- **Feasible Alts Analysis – Master Plan for entire project area screened with the NFP process**

- **Project can be divided into phases. Design/Construction Capital and Maintenance costs:**
  - **Phase I (Meets SCW Local Funding KPI) – Reach 1 (Coyote to King Rd)**
    - **Widened bank to provide additional channel capacity and stream restoration**
    - **$17 million capital and $145,000 annual maintenance cost**
    - **Phase I would protect 450 parcels from 1% flood including the BART Station area**
  - **Phase II – Reaches 2 & 3 (King Road to Capital Ave)**
    - **Channel widening and stream restoration and short setback levees and floodwalls**
    - **$7 million capital and $165,000 annual maintenance cost**
    - **Phases I and II would protect 1,250 parcels from 1% flood including BART Station area**
  - **Phase III – Reaches 4-7 (Capital to Dorel)**
    - **$43 million capital and $300,000 annual maintenance cost (note: capital costs depend on developing plans and agreements with City of San Jose and County for use of land for flood detention)**
    - **Phases I through III would protect all 8,000 parcels at risk from 1% flood**

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Upper Llagas Creek Flood Protection Project Update
November 18, 2019

As part of the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program), the Santa Clara Valley Water District (Valley Water) is undertaking the Upper Llagas Creek Flood Protection Project (Llagas Creek Project) in partnership with the U.S. Army Corps of Engineers (USACE) and the City of Morgan Hill (City) to provide 1% flood protection to approximately 1,100 homes and 500 businesses along West Little Llagas Creek, East Little Llagas Creek, and Llagas Creek. The Llagas Creek Project is approximately 13.9 miles long and encompasses the City of Morgan Hill, City of Gilroy, and various unincorporated areas of Santa Clara County, including San Martin. (Please refer to Project Map). The Llagas Creek Project will be constructed in two phases and flood protection will only be realized after construction of both phases.

The Llagas Creek Project consists of channel widening and deepening, instream improvements for wildlife habitat, and revegetation. Mitigation elements to offset environmental impacts associated with the construction work includes the following environmental elements:

- Riparian mitigation consisting of approximately 114 acres of native vegetation plantings;
- Creation of the Lake Silveira wetlands, approximately 5 acres;
- Creation of plant, fish, and wildlife habitat;
- Invasive plant removal (13.0± acres);
- In-stream complexities-woody debris (464 instream complexity features including divide logs, wing deflectors, rootwads and boulder clusters);
- Turtle basking sites within the created wetlands (10 turtle basking sites);
- Tree girdling (27 invasive trees girdled for bat/owl habitat);
- Bat boxes (14);
- Upland log piles (148 locations);
- Removal of legacy trash and hardscape debris (2.3± acres of remediation);
- In-fill native planting sites (11± acres).

The Phase 1 Construction Contract was awarded to Graniterock Construction in the sum of $68,118,602 on July 23, 2019 by Valley Water Board of Directors. The first calendar day chargeable was September 3, 2019 and construction is underway. Phase 1 construction involves construction of Reaches 4 and 7a, a portion of Reach 5, and the Lake Silveira wetlands, the Project's on-site compensatory mitigation (Please refer to Project Map).

The design documents for Phase 2 are 95% complete and there remains approximately six (6) required parcels to be acquired for Phase 2 construction. Phase 2 construction includes construction of a portion of Reach 5, Reach 6, Reach 7b, Reach 8, and Reach 14 (Please refer to Project Map). Reach 8 includes an approximately 2,000 linear foot

underground high flow diversion tunnel to be constructed beneath existing Nob Hill within the City of Morgan Hill. If sufficient funding is secured, the Phase 2 Construction Contract may be advertised for construction in as early as early 2020, with a construction start by summer 2020.

Phase 2 currently has an approximately $88 million funding shortfall. Valley Water staff are actively pursuing external funding, including potential funding from the National Resource Conservation Service (NRCS). If these funds are not able to be secured at the time the Phase 2 is ready to be advertised, it will be a decision for Valley Water's Board whether to reallocate funds from other projects to the Llagas Creek Project or to wait until additional funding sources can be secured. Completion of the Phase 2 portion of the project, except for Reach 14, is required to achieve the stated 1% flood protection for the homes and businesses identified as project beneficiaries.

Upper Llagas Creek flood protection project

project map

The **Upper Llagas Creek** watershed encompasses the area of Llagas Creek north of Buena Vista Avenue as well as its tributaries, including the West Little Llagas and East Little Llagas Creeks.

PHASE 1 (4.2 miles)
- Reach 4 — 2.4 miles
- Reach 5 — 0.3 miles
- Reach 7a — 1.5 miles
- Lake Silveira — On-site mitgation

PHASE 2 (9.7 miles)
- Reach 5 — 0.2 miles
- Reach 6 — 3.2 miles
- Reach 7b — 1.4 miles
- Reach 8 — 1.5 miles
- Reach 14 — 3.4 miles

Est. 100-year flood area

N

Morgan Hill
San Martin
Gilroy
Lake Silveira
Chesbro Reservoir
Uvas Reservoir
Coyote Reservoir
Llagas Rd
El Toro Elementary School
E Main Ave
Madrone Channel
E Dunne Ave
Murphy Ave
Tennant Creek
Britton School
Galvan Park
Peak Ave
Morgan Hill City Hall and Civic Center
Morgan Hill Community Center
San Pedro Ave
Barrett Elementary School
Tennant Ave
Fisher Ave
101
Edmundson Ave
West Little Llagas Creek
Maple Ave
Sycamore Ave
E Middle Ave
Columbet Ave
Center Ave
San Martin Creek
Center Creek
Paradise Park
Oakwood Country School
Howard Wiechert Park
Watsonville Rd
W Middle Ave
Llagas Ave
California Ave
San Martin/Gwinn Elementary School
East Little Llagas Creek
New Creek
Foothill Ave
W San Martin Ave
South County Airport
Hayes Creek
Church Ave
Church Creek
Newl Ave
Highland Ave
Monterey Rd
Church Percolation Ponds
Masten Ave
Santa Teresa Blvd
West Branch Llagas Creek
Rucker Ave
Rucker Elementary School
Llagas Creek
Buena Vista Ave
91

PHASE 2 Reach 8
PHASE 2 Reach 7b
PHASE 1 Reach 7a
PHASE 2 Reach 14
PHASE 2 Reach 6
PHASE 1 Reach 5
PHASE 2 Reach 5
PHASE 1 Reach 4

Santa Clara Valley Water District

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Upper Guadalupe River Project Update

November 18, 2019

1. Overview
   This is a federally authorized project in partnership with the US Army Corps of Engineers to design and construct improvements along 5.5 miles of channel from Interstate 280 to Blossom Hill Road, also referred to as the Locally Preferred Project.

2. Completed
   a. Reach 6 channel work construction - December 2012
   b. Reach 10B channel work construction - December 2013
   c. Reach 12 channel work construction - December 2015

3. Current Status
   a. 65% Design for Reaches 7 and 8 channel work (USACE)
   b. 65% Design for vehicular bridges at Alma Ave/Willow Street (USACE)
   c. Prelim total project costs approx. $494 million > limit $404 million
   d. The USACE hasn't received funding for this project since 2014 stalling design/construction of Reaches 7 and 8
   e. Staff working with USACE for a path forward to make project more competitive for federal funding
      i. USACE to request $500K to conduct General Re-evaluation Report and $1.5M continue design of Reaches 7 and 8.

4. Next Steps for Valley Water
   a. Safe, Clean Water Program
      i. Key performance indicator to use local funding for Reach 7 construction
   b. Staff evaluated options and costs for Reaches 7 and 8 (see table)
   c. Remaining project budget approx. $55.6 M

Upper Guadalupe River Costs

Reaches 7&8

November 18, 2019

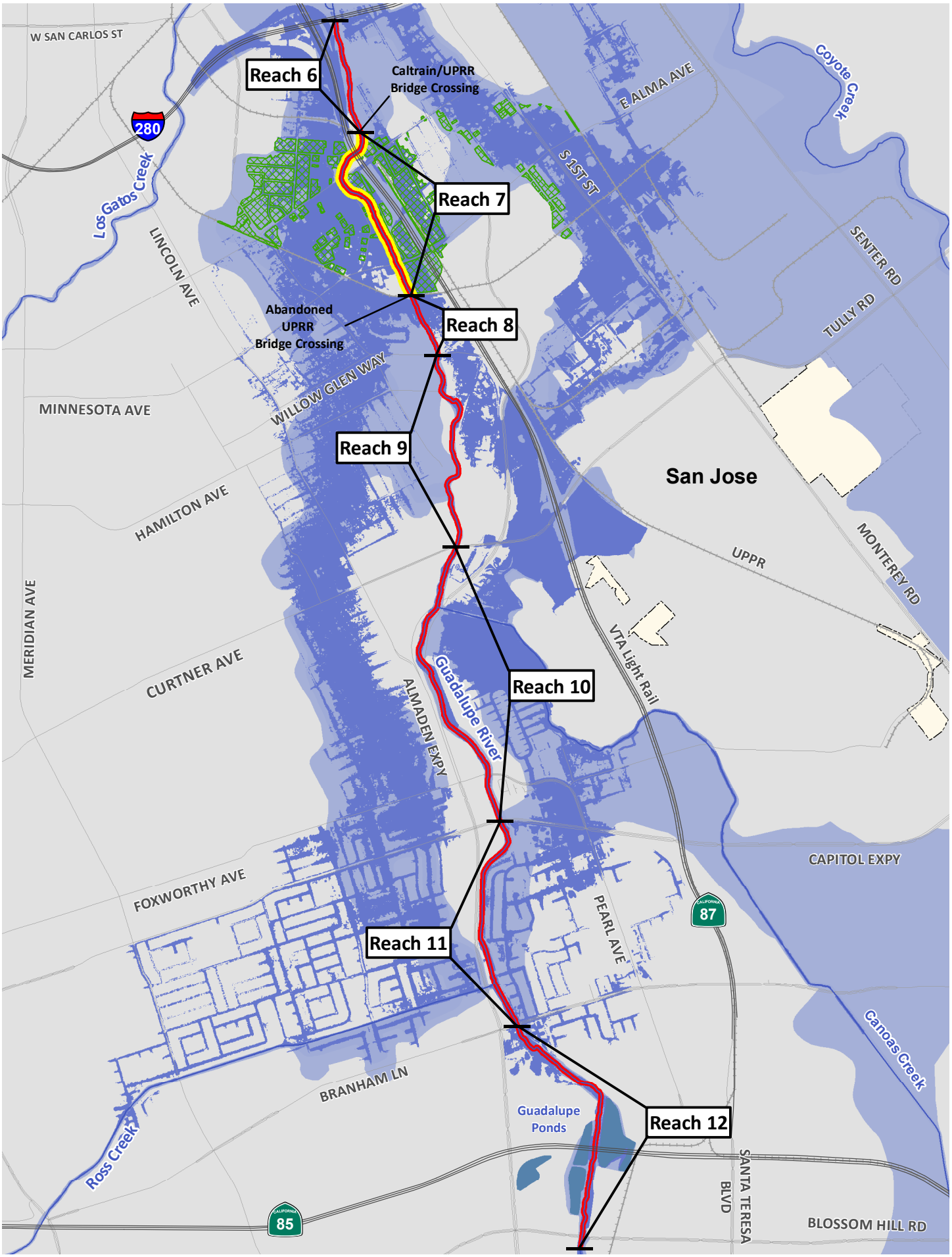
Reach	50-year	100-year	50-Year Channel with 100-year Bridges
7	$39 M	$52.5 M	$41.7 M
8	$10.4 M	$14.7 M	$10.4 M
Total	$49.4 M	$67.2 M	$52.1 M

All costs are in 2019 dollars

Notes:

Bypass channel at 100-year is wider by 60 feet

Two bridges at 100-year are longer by 60 feet



Preferred Project (KPI #1)

Locally Funded Only Project (KPI #2)

Locally Funded Project Improvement Area

1% Flood Protection Zone (As of 2014)

Updated 1% Flood Risk Zone

Upper Guadalupe Reach Endpoints

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Capital Improvement Program Committee
11/18/2019

Safe, Clean Water and Natural Flood Protection Program							Potential Scenarios for Nov. 18 CIP Committee Discussion`		
Priority	**Flood Protection Projects**	**KPIs or Additional Alternatives**	**Estimated Remaining Cost**	**Current Remaining Secured Funding (incl. planned future yrs) (All Funds)**	**Potential Shortfall or Available Funds**	**Current Status**	**Scenario 1**	**Scenario 2**	**Scenario 3**
CSC	Coyote Creek	KPI #1: Preferred Project w/federal and local funding: Secure alternative funding sources to construct a flood protection project that provides flood risk reduction from floods up to the level of flooding that occurred on February 21, 2017, approximately a 20 to 25 year flood event, between Montague Expressway and Tully Road.	$40M - $85M	$28M	($12M - $57M)	KPI 2.a. has been accomplished. 2.b. is underway. Draft Problem Definition Report completed in January 2019; Detailed alternatives analysis underway currently; Draft Planning Study Report to be completed by January 2020. Public meetings scheduled for early Nov. will better inform the preferred project selection and help to narrow the potential cost estimates.	Reallocate $57M to Coyote Creek to address worst case scenario shortfall ($47M from Upper Penitencia and $10M from Upper Guadalupe) to demonstrate ability to construct the project, for a total budget of approximately $85M.	Reallocate $23M funding to Coyote Creek ($23M from Upper Penitencia) to address best case scenario shortfall and demonstrate commitment to the project, for a total budget of approximately $51M. Reassess additional funding needs once design is narrowed.	Reallocate $45M in funding to Coyote Creek($30M from Upper Penitencia and $15M from Upper Guadalupe) to address shortfall, for a total budget of approximately $73M. Reassess additional funding needs once design is narrowed.
		KPI #2: Local-funding-only: (a) Identify short-term flood relief solutions and begin implementation prior to the 2017-2018 winter season; (b) Complete the planning and design phases of the preferred project; and (c) With any remaining funds, identify and construct prioritized elements of the preferred project.	$28M		$0M				
E4	Upper Penitencia Creek	KPI #1: Preferred Project w/federal and local funding: Construct a flood protection project to provide 1% flood protection to 5,000 homes, businesses and public buildings. (Phase 1 -3 (Reaches 1-7), combined protects 8,000 parcels)	Phase I (17M) + Phase II ($7M) + Phase III ($43M) = $67M	$47M	($20M)	Planning study completed. Recommended project identified July 2019; USACE does not support multi-objective project; construction extent and options are unknown until completion of planning. PSR expected by the end of 2019.	Modify KPI #2 to planning only and reallocate $47M in remaining funds to Coyote Creek Project.	Modify KPI #2 to construct Phase I and Phase II to maximize protection and reallocate $23M in remaining funds to Coyote Creek Project.	Proceed with local funding only KPI (Reallocate available funds of $30M to Coyote)
		KPI #2: Local-funding-only: Acquire all necessary rights-of-way and construct a 1% flood protection project from Coyote Creek confluence to King Road. (Phase I - Reach 1, protects 450 parcels)	Phase I ($17M)		$30M				
		Additional Alternative: Construct Phase I and Phase II, combined protects 1,250 parcels (Reaches 2 and 3 - King Rd. to Capital, protects 800 parcels)	Phase I ($17M) + Phase II ($7M) = $24M		$23M				
E6	Upper Llagas Creek	KPI #1: Preferred Project w/federal and local funding: Provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat. (Phases 1 and 2)	TBD	$31M	N/A	The Phase 1 Construction Contract was awarded to Graniterock Construction in the sum of $68,118,602 on 7/23/19. The design documents for Phase 2 are 95% complete and there remains approximately six (6) required parcels to be acquired. If funding secured construction could start by summer 2020.	No change.	No change.	No change.
		KPI #2: Local-funding-only: Provide 100-year flood protection for Reach 7 only (up to W. Dunne Avenue in Morgan Hill). A limited number of homes and businesses will be protected. (Portions of Reach 7 are included in Phases 1 and 2)	TBD		N/A		No change.	No change.	No change.
		Additional Alternatives: Phase 1: Reaches 4, 5 (portion), and 7A (Buena Vista Ave. to Hwy 101 in San Martin and from Monterey Rd to Watsonville Rd in Morgan Hill)	$82.8M (combined construction)		$0		Under construction. No action required.	Under construction. No action required.	Under construction. No action required.
		Additional Alternatives: Phase 2: Reaches 5 (portion), 6, 7B, 8 and 14 (Hwy 101 to Monterey Rd in San Martin, from Watsonville Rd to Llagas Rd in Morgan Hill, and from Sycamore Ave to approx. Hwy 101 in San Martin)	$119M (combined construction est.)		$88M		No change. Wait until NRCS funding is determined.	No change. Wait until NRCS funding is determined.	No change. Wait until NRCS funding is determined.
		Additional Alternatives: Phase 2 a: Use the remaining available funds to construct the tunnel without connecting it to avoid transferring risk of flooding.	$30M		$0		Construct Phase 2a.	Construct Phase 2a.	Construct Phase 2a.
E8	Upper Guadalupe River	KPI #1: Preferred Project w/federal and local funding: Construct a flood protection project to provide 1% flood protection to 6,280 homes, 320 businesses and 10 schools and institutions.	$247M (50% of USACE est. of $494M)	$54M	($193M)	Reaches 10B and 12 of the project were completed in 2015 and Reach 6 will be done with the completion of the gravel augmentation project by summer 2020 to help advance the overall project. Reaches 7&8 are at 65% design w/USACE.Reaches 9, 10A, 10C and 11 are postponed as USACE re-evaluates total project cost.	TBD based upon USACE Re-evaluation.	TBD based upon USACE Re-evaluation.	TBD based upon USACE Re-evaluation.
		KPI #2: Local-funding-only: Construct flood protection improvements along 4,100 feet of Guadalupe River between Southern Pacific Railroad (SPRR) crossing, downstream of Willow Street, to Union Pacific Railroad (UPRR) crossing, downstream of Padres Drive. Flood damage will be reduced; however, protection from the 1% flood is not provided until completion of the entire Upper Guadalupe River Project. (Reach 7)	$52.5M		$1.5M		Modify KPI #2 to construct Reaches 7 at 50-yr channel w/100-yr bridges and reallocate $10M to Coyote Creek project.	Modify KPI #2 to construct Reaches 7 and 8 at 50-yr channel w/100-yr bridges.	Modify KPI #2 to construct Reaches 7 at 50-yr channel and reallocate $15M to Coyote Creek project.
		Additional Alternatives: Modify KPI #2 to construct Reaches 7 and 8 at 100-yr level protection	$67.2M		($13.2M)				
		Additional Alternatives: Modify KPI #2 to construct Reach 7 at 50-year level protection.	$39M		$15M				
		Additional Alternatives: Modify KPI #2 to construct Reaches 7 and 8 at 50-yr level protection	$49.4M		$4.6M				
		Additional Alternatives: Modify KPI #2 to construct Reach 7 at 50-yr channel w/100-yr bridges	$41.7M		$12.3M				
		Additional Alternatives: Modify KPI #2 to construct Reach 7 and 8 at 50-yr channel w/100-yr bridges	$52.1M		$1.9M				

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Santa Clara Valley Water District

File No.: 19-1124

Agenda Date: 11/18/2019
Item No.: *4.4

SUPPLEMENTAL COMMITTEE AGENDA MEMORANDUM

Capital Improvement Program Committee

SUBJECT:
Safe, Clean Water and Natural Flood Protection Program Flood Protection Projects Funding Scenario Discussion.

RECOMMENDATION:

A. Receive project updates on the following Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) Flood Protection Projects:
    a. Coyote Creek
    b. Upper Penitencia Creek
    c. Upper Llagas Creek
    d. Upper Guadalupe River
B. Review potential funding scenarios, provide feedback as necessary; and
C. Determine recommendation to full Board.

SUMMARY:
The purpose of this Supplemental Committee Agenda Memo is to provide additional information not available at the time of the 10-day publishing of the November 18, 2019 Capital Improvement Program agenda regarding the Coyote Creek Flood Protection Project.

The Supplemental Attachment 1 includes information that was developed for and presented during the recent public meetings for the Coyote Creek Flood Protection Project.

ATTACHMENTS:
Supplemental Attachment 1: Coyote Creek Update

UNCLASSIFIED MANAGER:
Melanie Richardson, 408-630-2035
Nina Hawk, 408-630-2736

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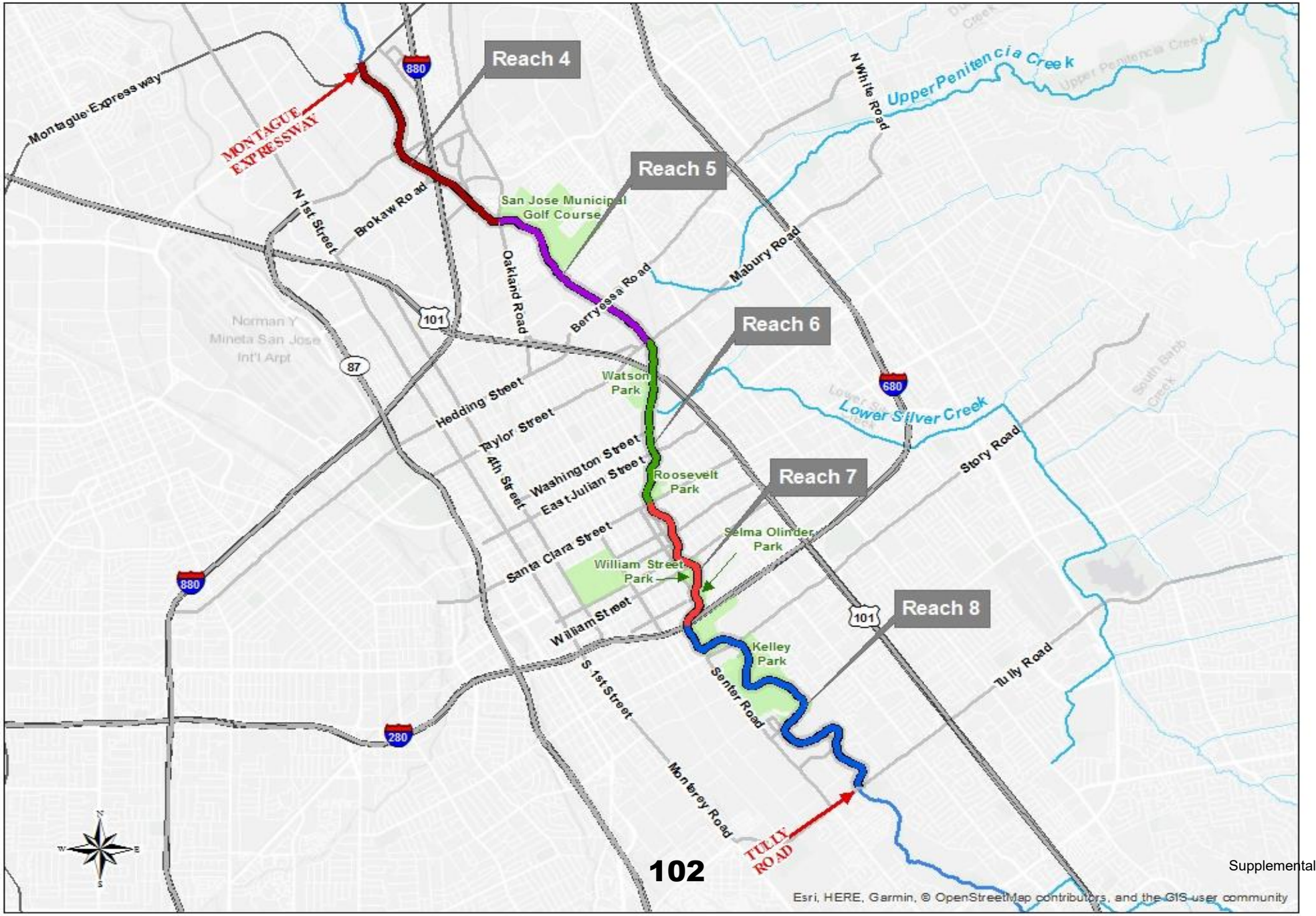
Coyote Creek Flood Protection Project Update

Conceptual/Feasible Project Alternatives


Reach 4
Reach 5
Reach 6
Reach 7
Reach 8
MONTAGUE EXPRESSWAY
Montague Expressway
N 1st Street
Brokaw Road
Oakland Road
Berryessa Road
Mabury Road
N White Road
Upper Penitencia Creek
San Jose Municipal Golf Course
Norman Y Mineta San Jose Int'l Arpt
Watson Park
Hedding Street
Taylor Street
4th Street
Washington Street
East Julian Street
Roosevelt Park
Lower Silver Creek
Story Road
Santa Clara Street
Selma Olinder Park
William Street Park
William Street
Kelley Park
S 1st Street
Senter Road
Tully Road
Monterey Road
TULLY ROAD
880
101
87
680
280
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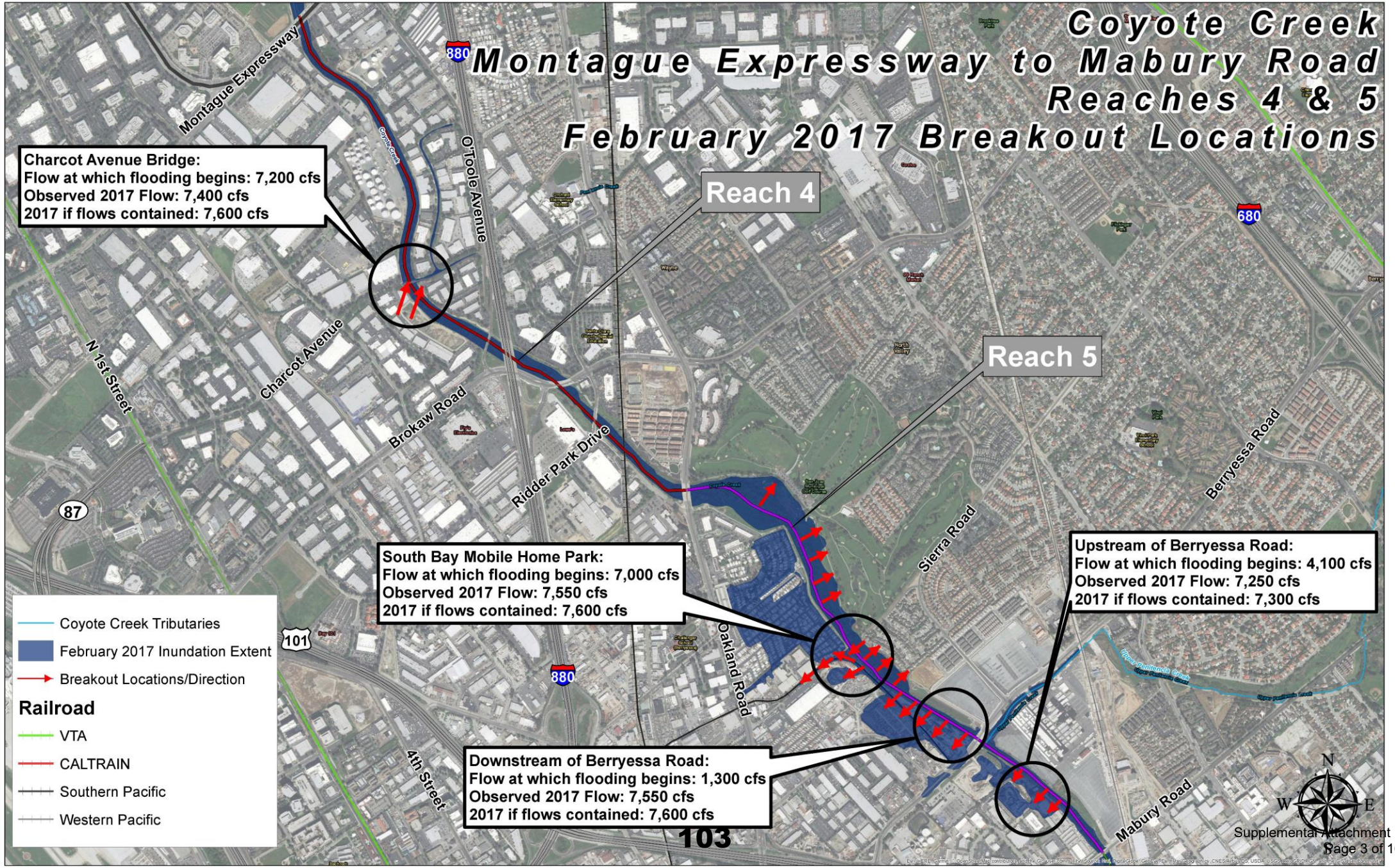
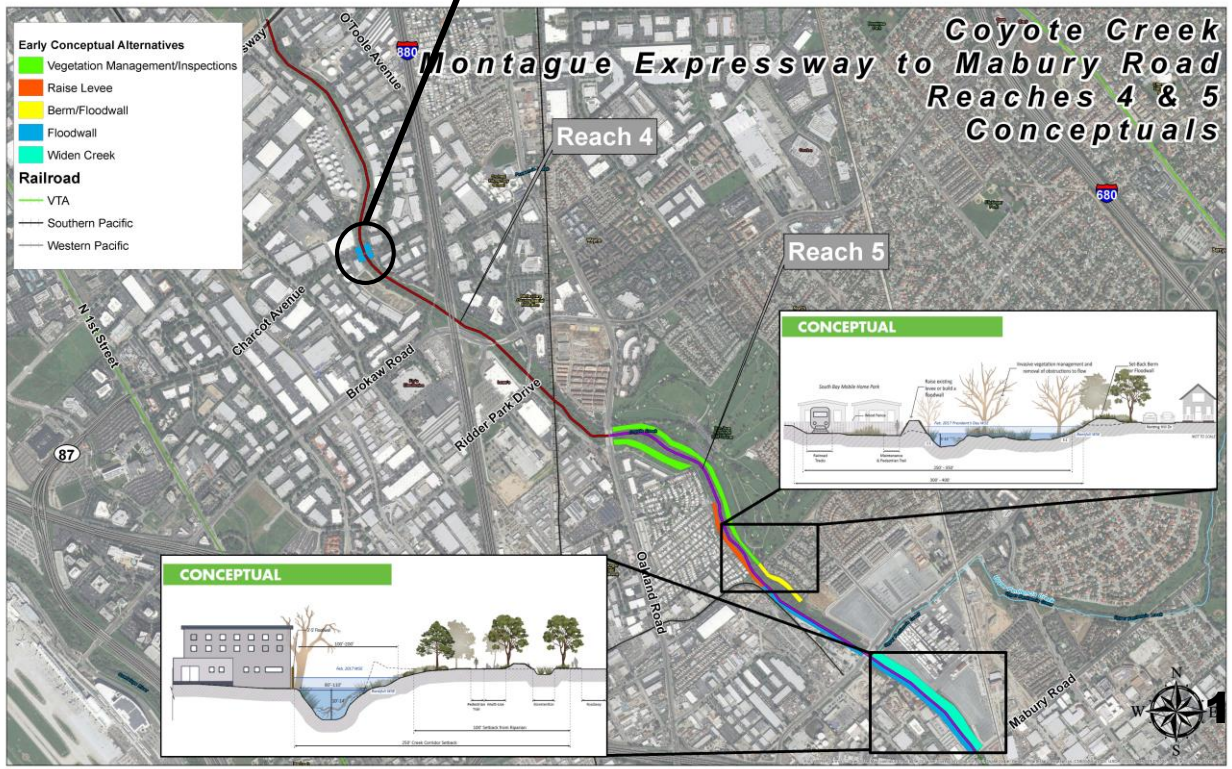
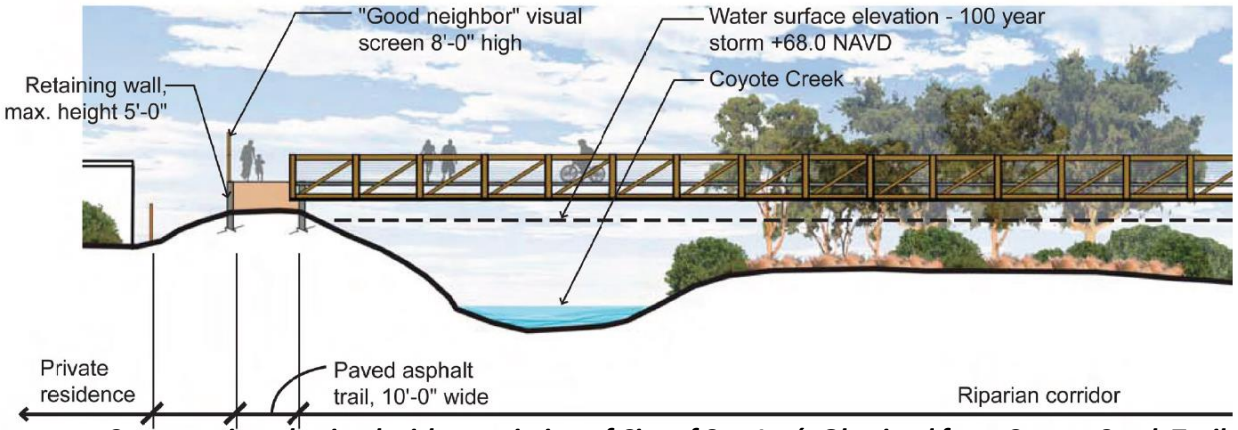

Coyote Creek
Montague Expressway to Mabury Road
Reaches 4 & 5
February 2017 Breakout Locations
Charcot Avenue Bridge:
Flow at which flooding begins: 7,200 cfs
Observed 2017 Flow: 7,400 cfs
2017 if flows contained: 7,600 cfs
Reach 4
Reach 5
South Bay Mobile Home Park:
Flow at which flooding begins: 7,000 cfs
Observed 2017 Flow: 7,550 cfs
2017 if flows contained: 7,600 cfs
Upstream of Berryessa Road:
Flow at which flooding begins: 4,100 cfs
Observed 2017 Flow: 7,250 cfs
2017 if flows contained: 7,300 cfs
Downstream of Berryessa Road:
Flow at which flooding begins: 1,300 cfs
Observed 2017 Flow: 7,550 cfs
2017 if flows contained: 7,600 cfs
Montague Expressway
O'Toole Avenue
Charcot Avenue
N 1st Street
Brokaw Road
Ridder Park Drive
Berryessa Road
Sierra Road
Oakland Road
4th Street
Mabury Road
880
680
87
101
Coyote Creek Tributaries
February 2017 Inundation Extent
Breakout Locations/Direction
Railroad
VTA
CALTRAIN
Southern Pacific
Western Pacific
N
W
E
Miles

Reach 4 - Charcot Avenue Bridge

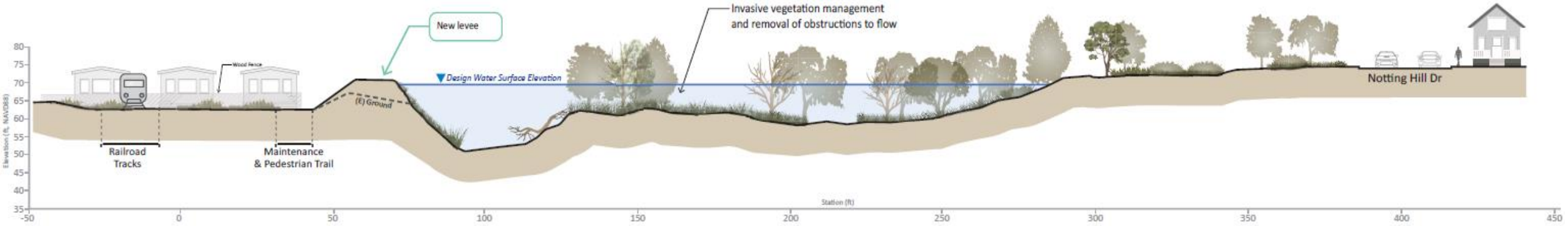
CONCEPTUAL



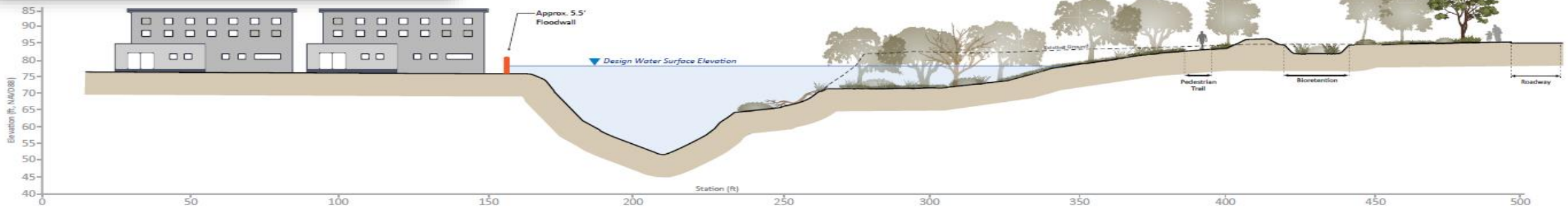
FEASIBLE



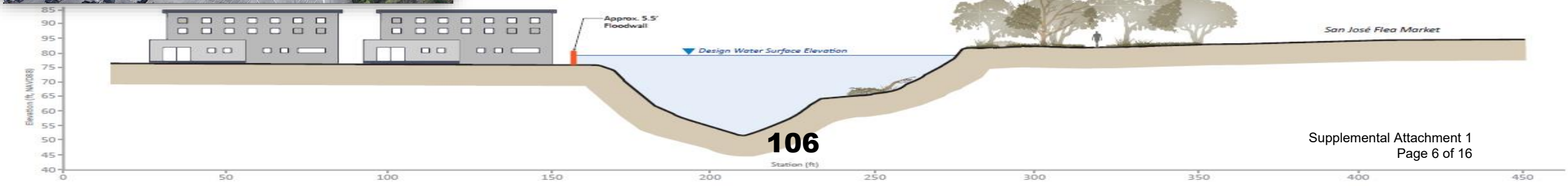
Cross-section obtained with permission of City of San José. Obtained from Coyote Creek Trail Master Plan, Montague to Watson Park, September 2011

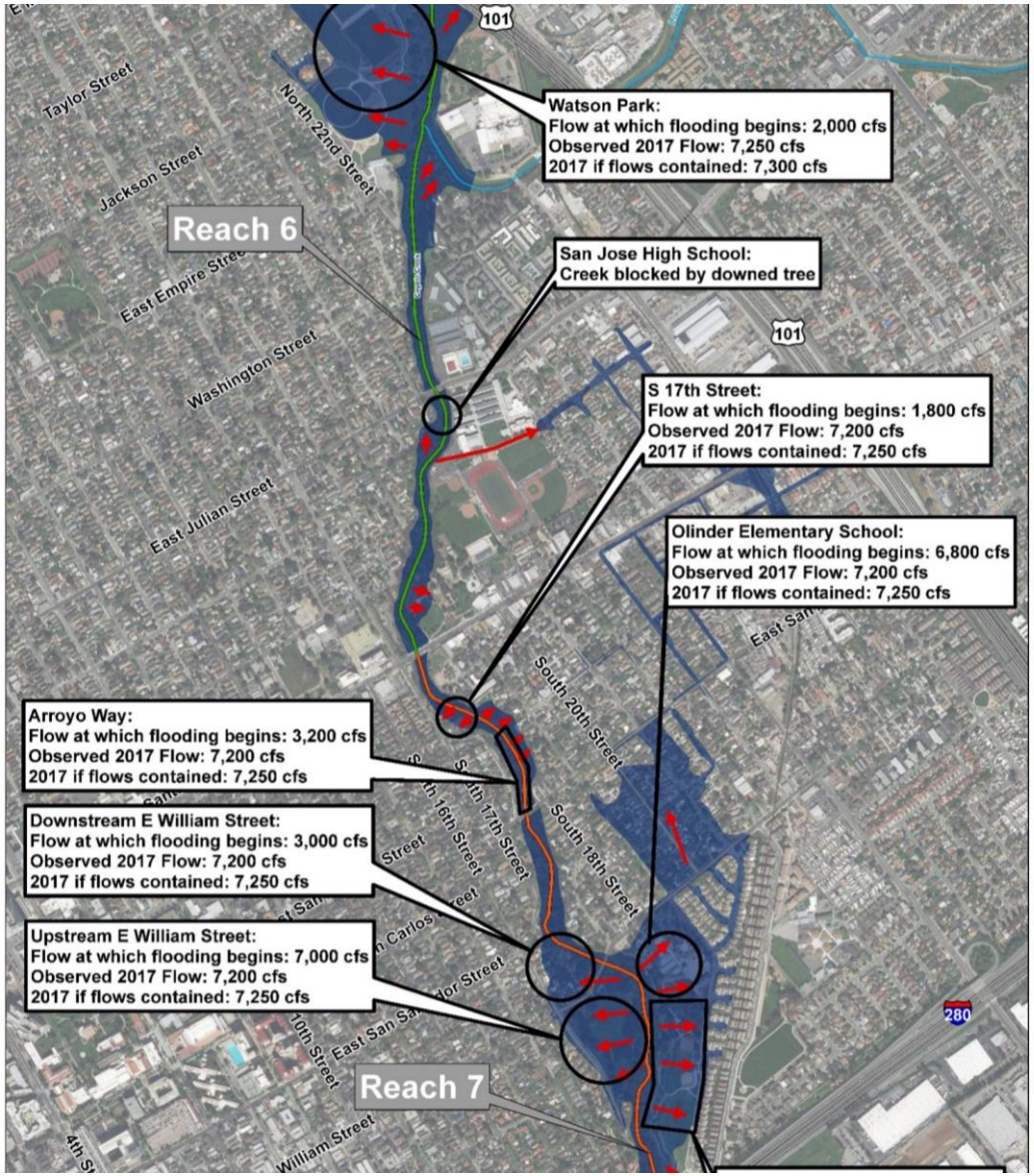


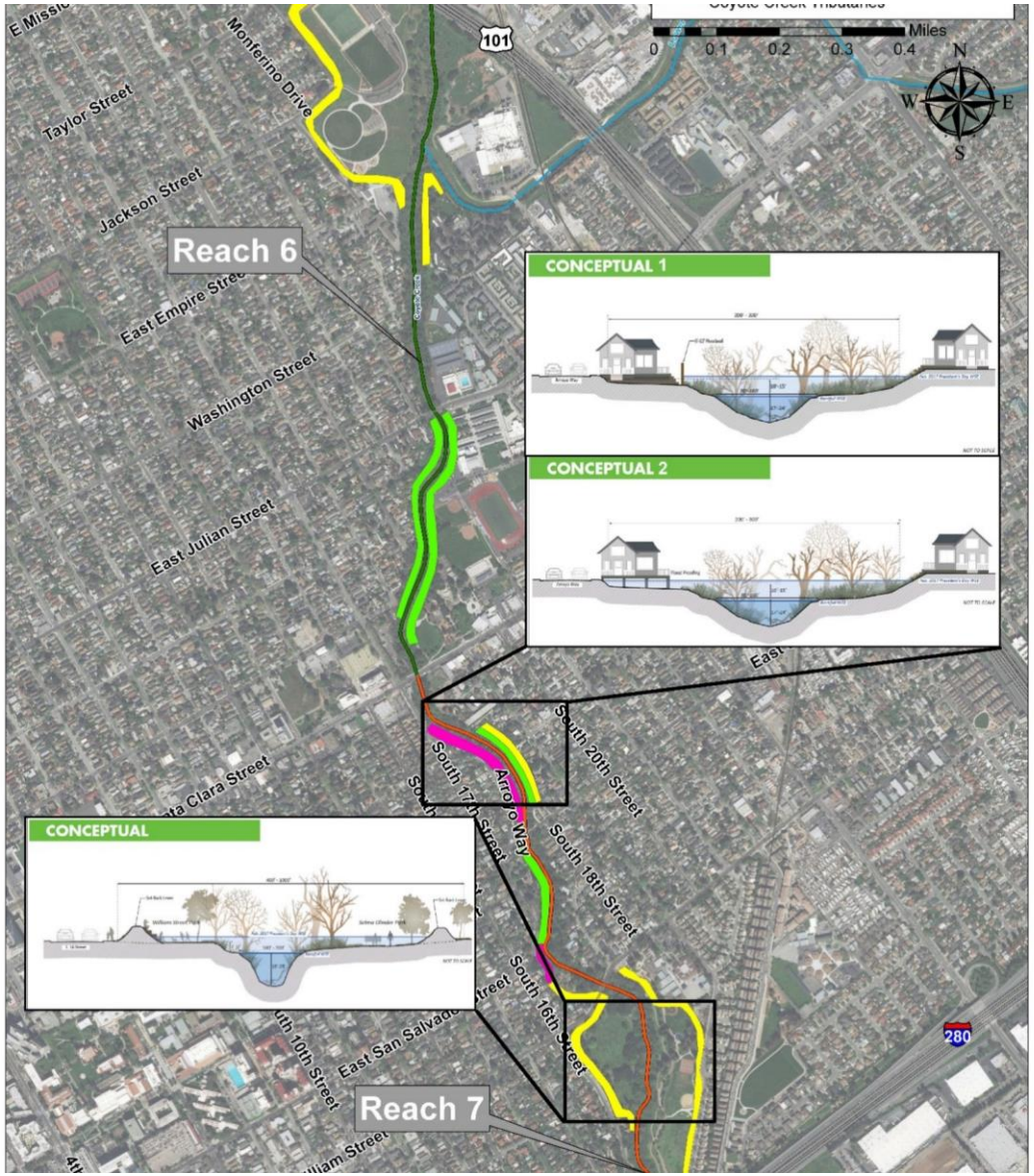

PROPOSED A

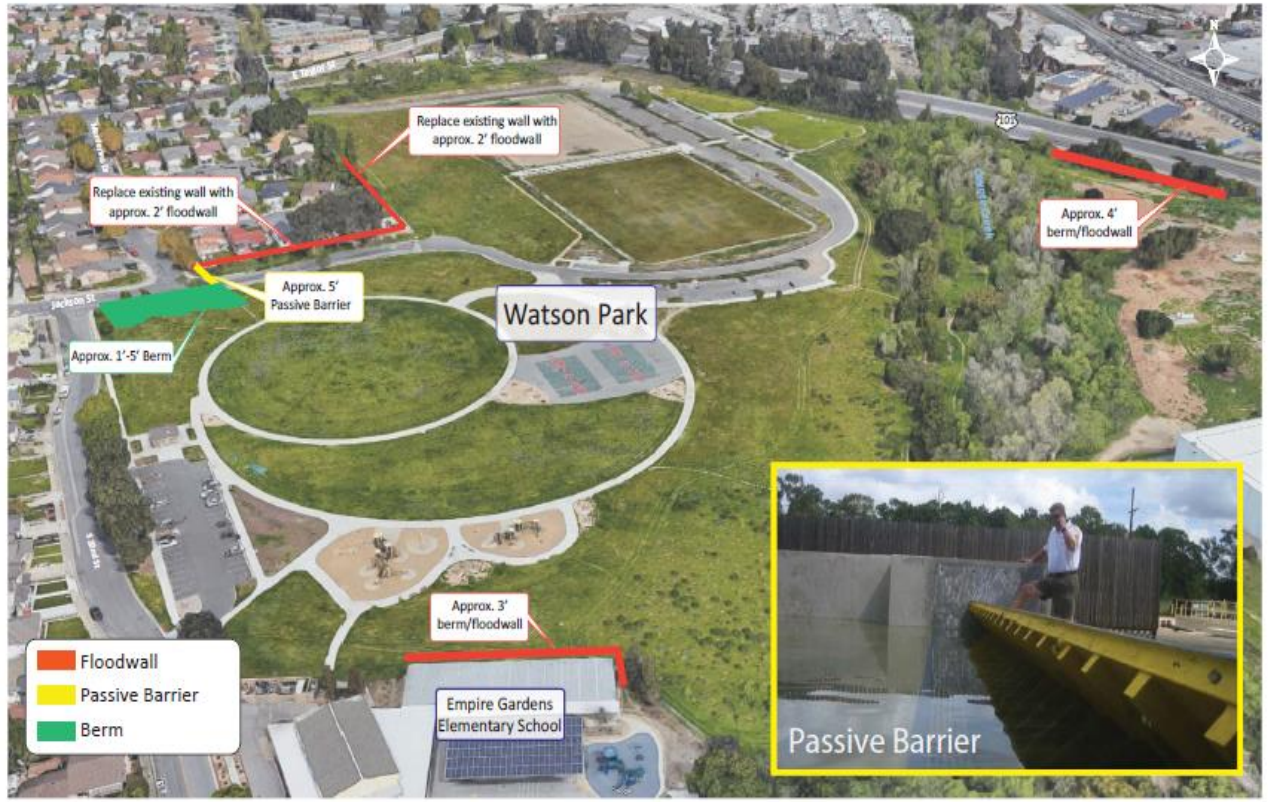

Approx. 5.5' Floodwall
Design Water Surface Elevation
Pedestrian Trail
Bioretention
Roadway
Elevation (ft, NAVD88)
Station (ft)

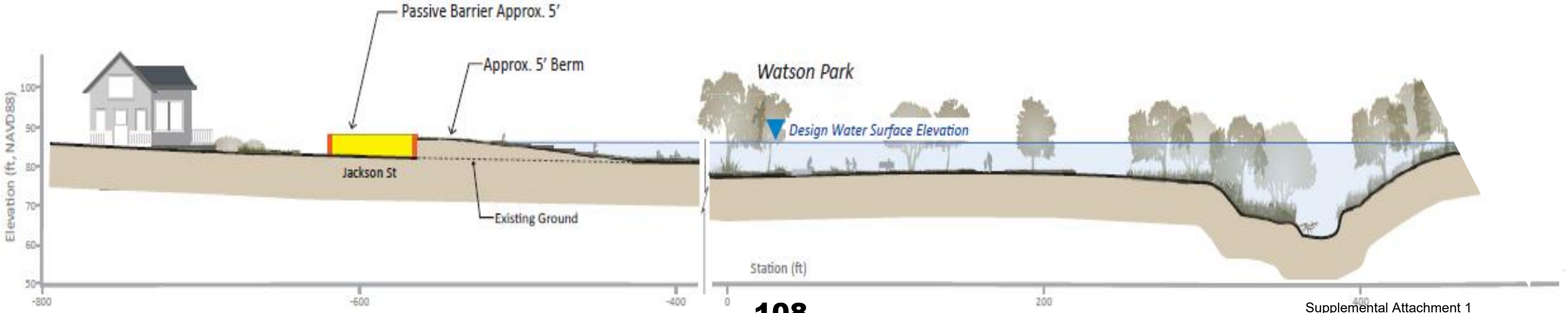

BART
Floodwall
San José Flea Market
PROPOSED B


Approx. 5.5' Floodwall
Design Water Surface Elevation
San José Flea Market
Elevation (ft, NAVD88)
Station (ft)


Watson Park:
Flow at which flooding begins: 2,000 cfs
Observed 2017 Flow: 7,250 cfs
2017 if flows contained: 7,300 cfs
San Jose High School:
Creek blocked by downed tree
S 17th Street:
Flow at which flooding begins: 1,800 cfs
Observed 2017 Flow: 7,200 cfs
2017 if flows contained: 7,250 cfs
Olinder Elementary School:
Flow at which flooding begins: 6,800 cfs
Observed 2017 Flow: 7,200 cfs
2017 if flows contained: 7,250 cfs
Arroyo Way:
Flow at which flooding begins: 3,200 cfs
Observed 2017 Flow: 7,200 cfs
2017 if flows contained: 7,250 cfs
Downstream E William Street:
Flow at which flooding begins: 3,000 cfs
Observed 2017 Flow: 7,200 cfs
2017 if flows contained: 7,250 cfs
Upstream E William Street:
Flow at which flooding begins: 7,000 cfs
Observed 2017 Flow: 7,200 cfs
2017 if flows contained: 7,250 cfs
Reach 6
Reach 7
Taylor Street
Jackson Street
North 22nd Street
East Empire Street
Washington Street
East Julian Street
South 20th Street
South 18th Street
South 17th Street
South 16th Street
East San Salvador Street
10th Street
William Street
101
280


Miles
0
0.1
0.2
0.3
0.4
N
W
E
S
CONCEPTUAL 1
CONCEPTUAL 2
CONCEPTUAL
Reach 6
Reach 7
Monterrino Drive
Taylor Street
Jackson Street
East Empire Street
Washington Street
East Julian Street
Santa Clara Street
South 20th Street
South 18th Street
South 17th Street
Arroyo Way
South 16th Street
East San Salvador Street
10th Street
William Street
101
280

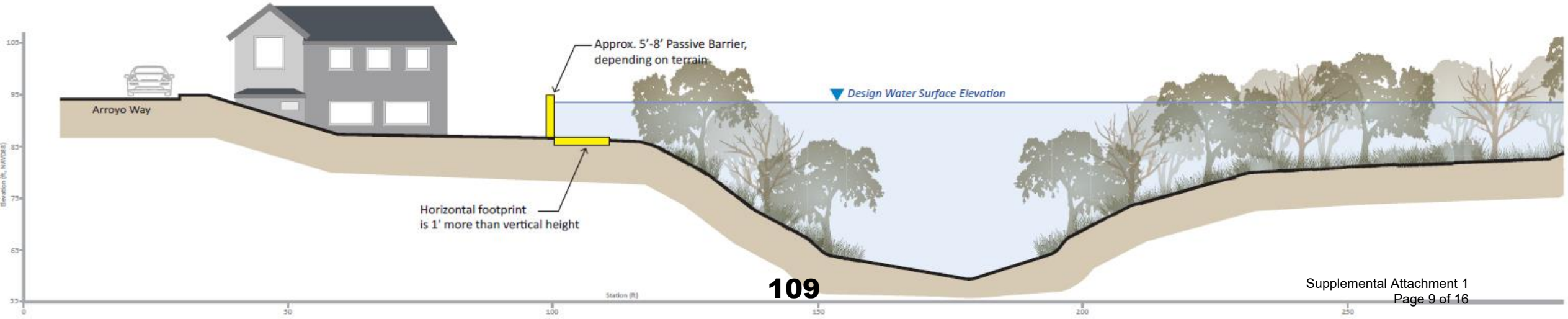

Replace existing wall with approx. 2' floodwall
Replace existing wall with approx. 2' floodwall
Approx. 5' Passive Barrier
Approx. 1'-5' Berm
Watson Park
Approx. 4' berm/floodwall
Approx. 3' berm/floodwall
Empire Gardens Elementary School
Floodwall
Passive Barrier
Berm
Passive Barrier


Passive Barrier Approx. 5'
Approx. 5' Berm
Jackson St
Existing Ground
Elevation (ft, NAVD88)
100
90
80
70
60
50
-800
-600
-400
Watson Park
Design Water Surface Elevation
Station (ft)
0
200

Reach 7 - E. Santa Clara St. to E. San Antonio St.

OPTION A – INSTALL PASSIVE BARRIER

82 S. 17th Street
96 S. 17th Street
All homes on east side of Arroyo Way

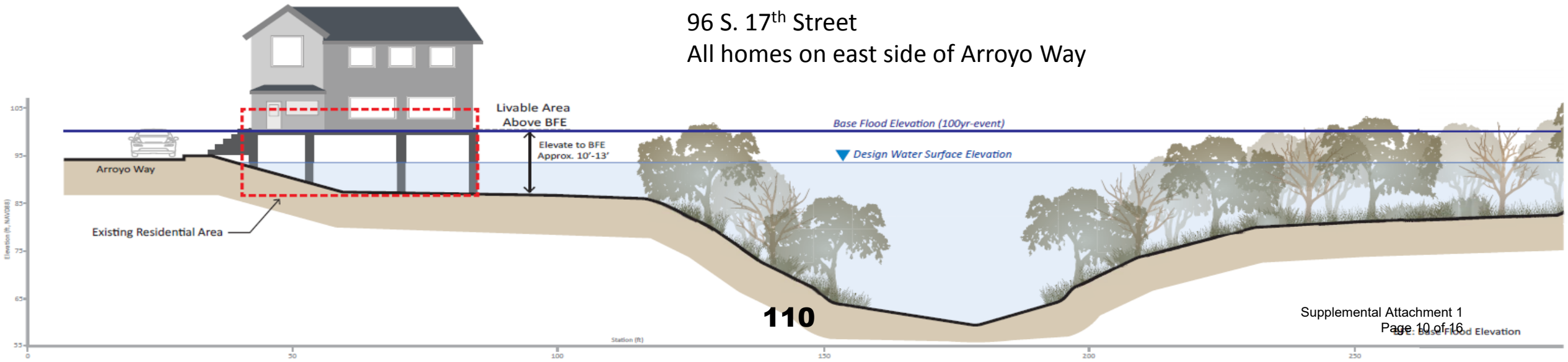


Reach 7 - E. Santa Clara St. to E. San Antonio St.

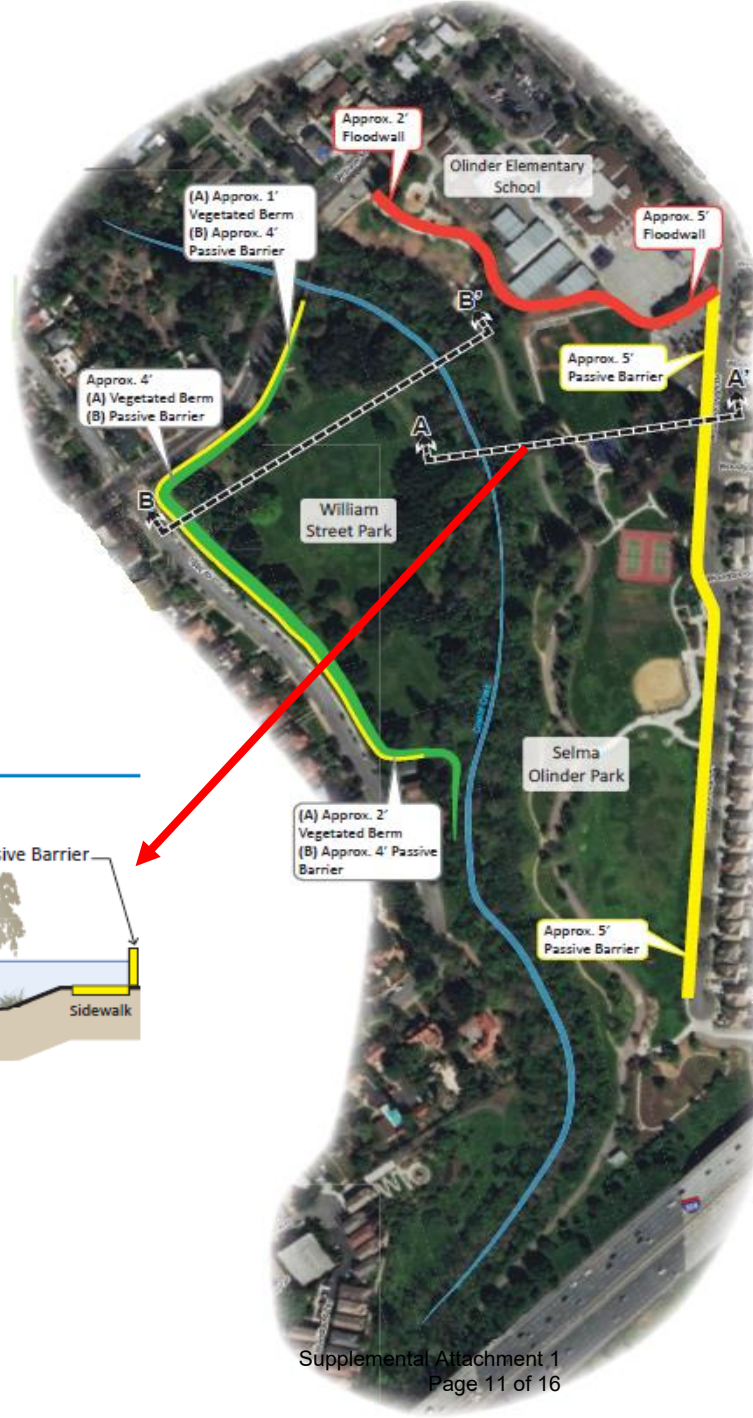
OPTION B – ELEVATE TO BASE FLOOD ELEVATION (BFE)

OPTION C – VOLUNTARY ACQUISITION

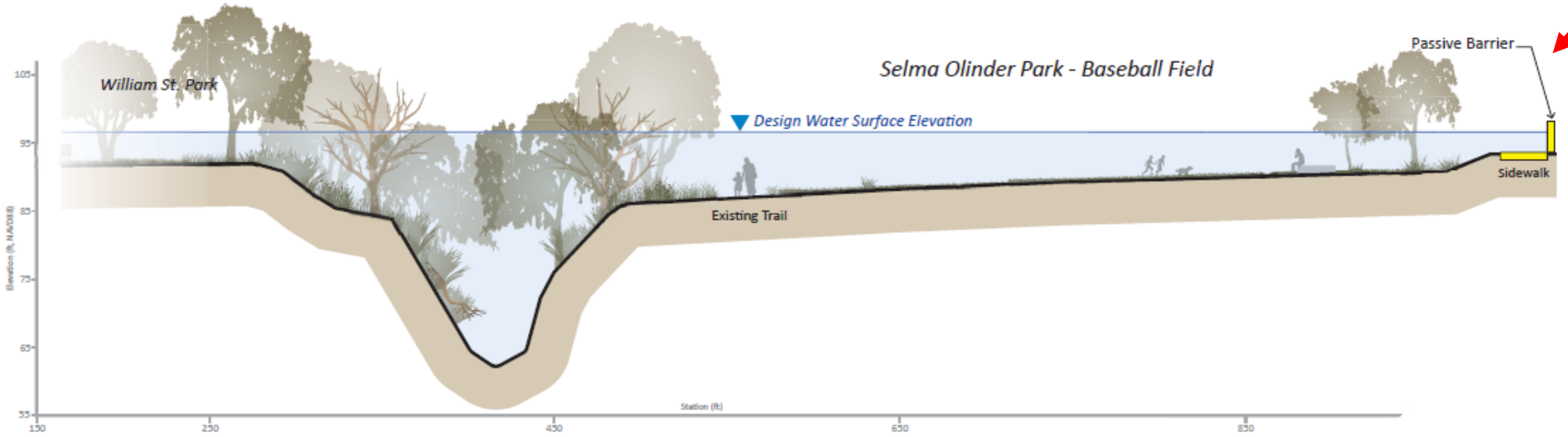
82 S. 17th Street
96 S. 17th Street
All homes on east side of Arroyo Way



Reach 7 - William Street Park & Selma Olinder Park

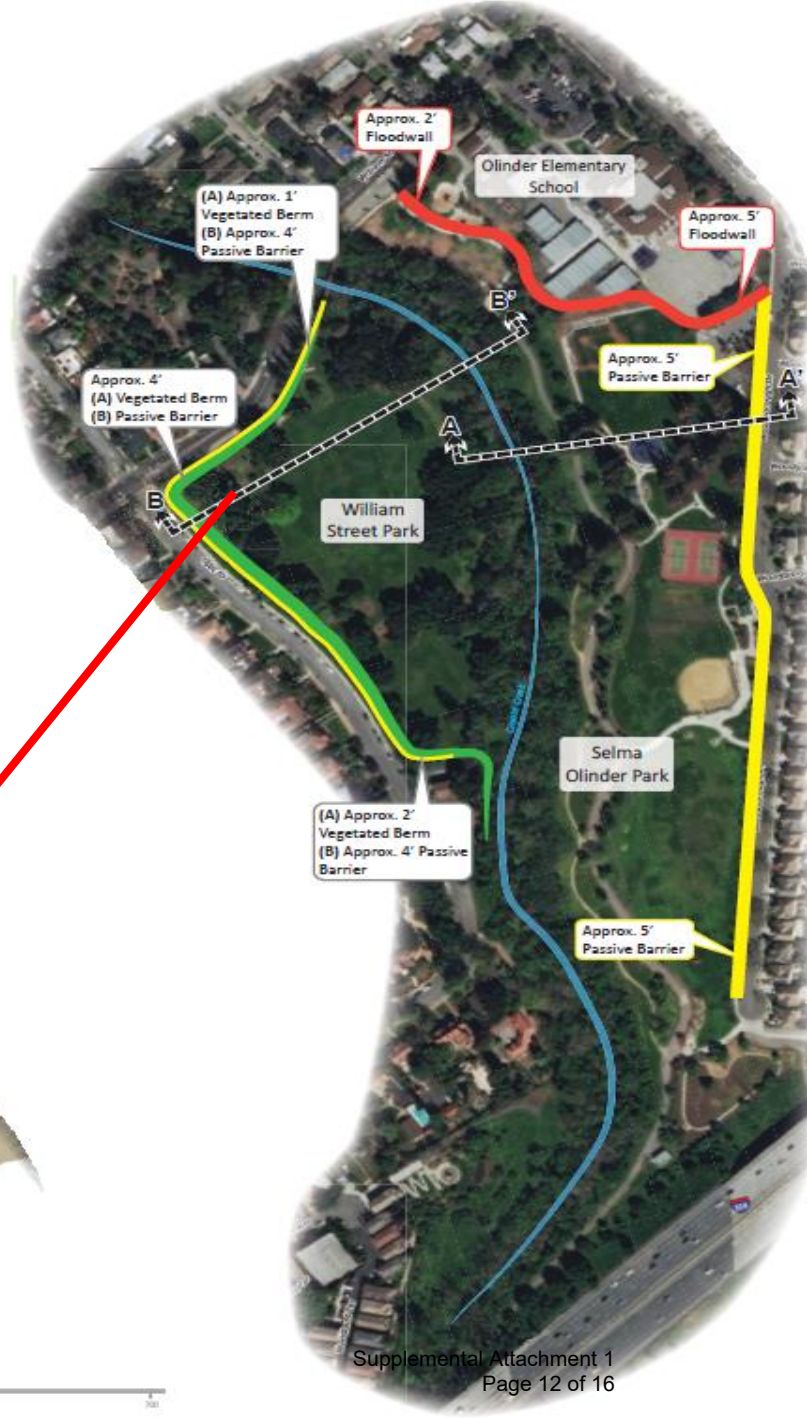


Cross Section A - A'

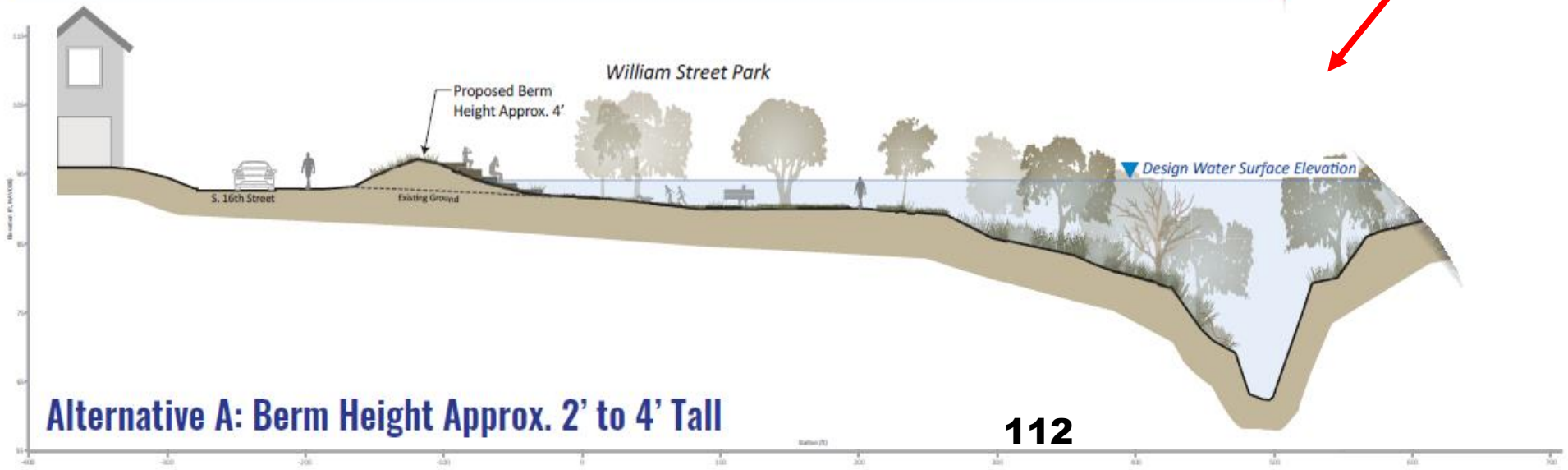


Passive Barrier Approx. 5' Tall

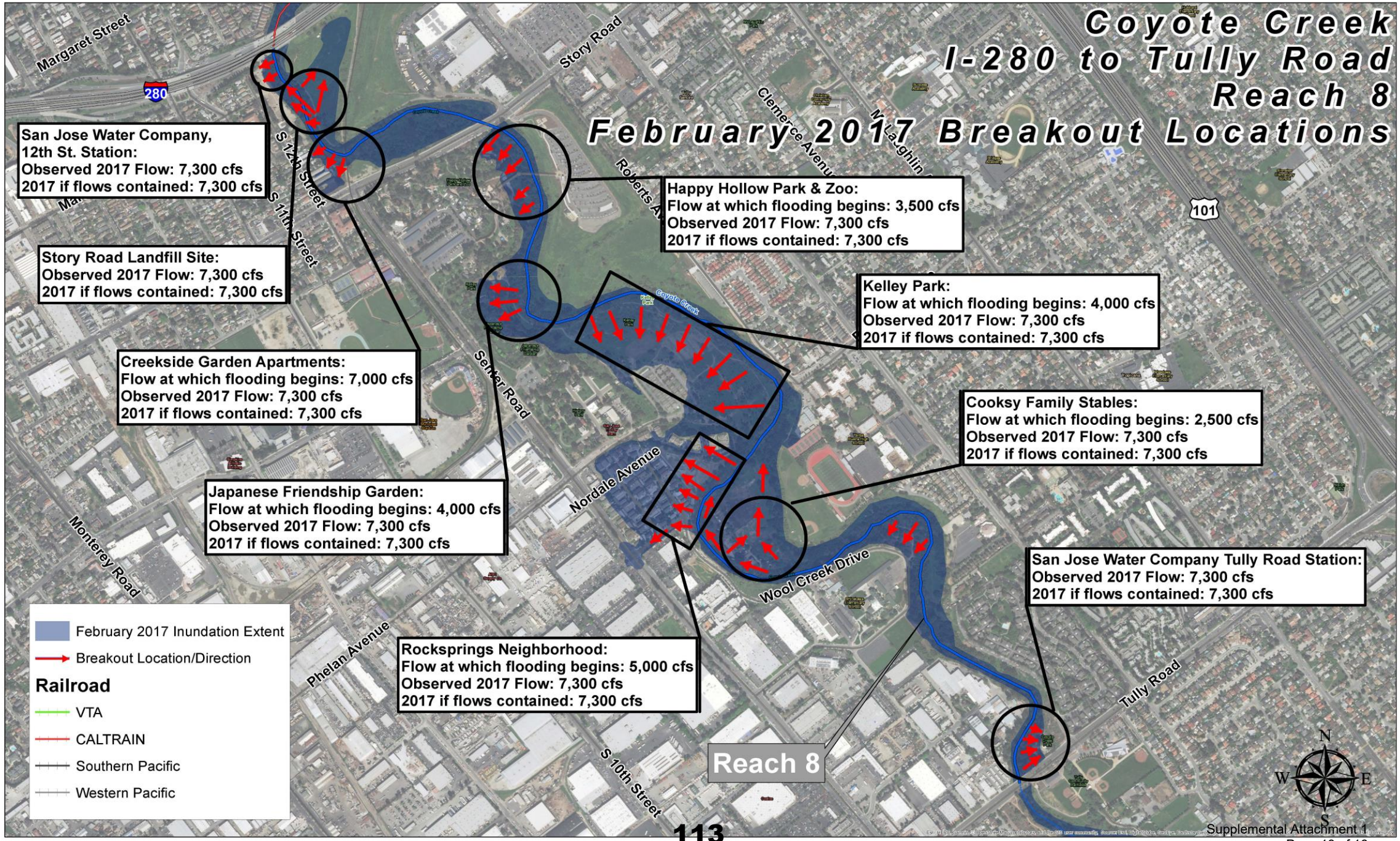
Reach 7 - William Street Park & Selma Olinder Park

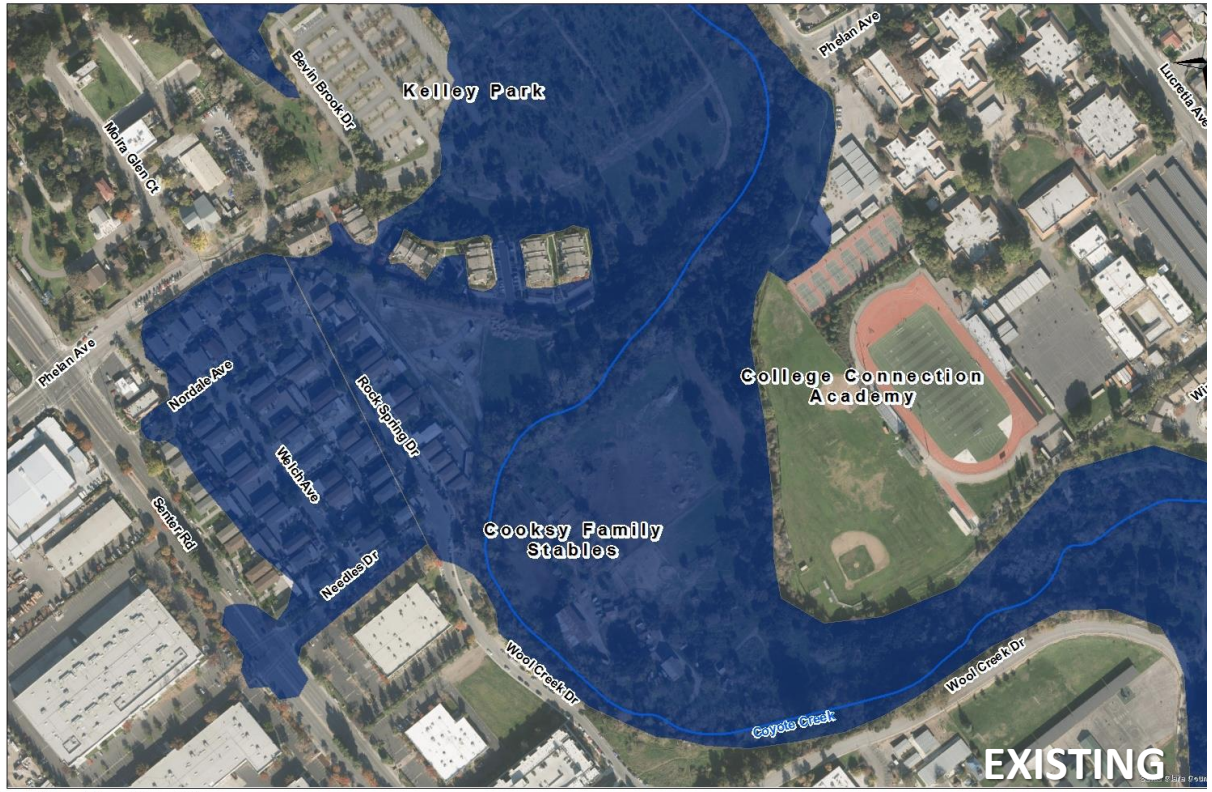


Cross Section B - B'

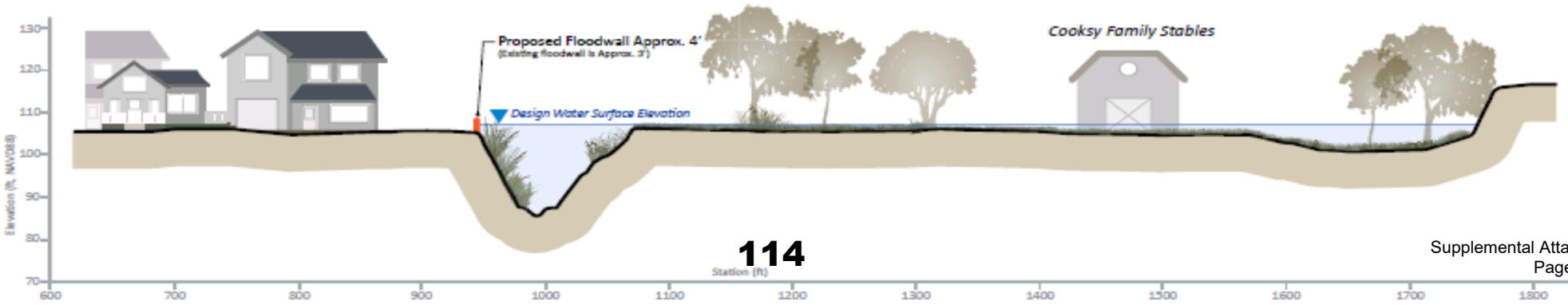


Alternative A: Berm Height Approx. 2' to 4' Tall


Coyote Creek
I-280 to Tully Road
Reach 8
February 2017 Breakout Locations
San Jose Water Company,
12th St. Station:
Observed 2017 Flow: 7,300 cfs
2017 if flows contained: 7,300 cfs
Story Road Landfill Site:
Observed 2017 Flow: 7,300 cfs
2017 if flows contained: 7,300 cfs
Creekside Garden Apartments:
Flow at which flooding begins: 7,000 cfs
Observed 2017 Flow: 7,300 cfs
2017 if flows contained: 7,300 cfs
Japanese Friendship Garden:
Flow at which flooding begins: 4,000 cfs
Observed 2017 Flow: 7,300 cfs
2017 if flows contained: 7,300 cfs
Rocksprings Neighborhood:
Flow at which flooding begins: 5,000 cfs
Observed 2017 Flow: 7,300 cfs
2017 if flows contained: 7,300 cfs
Happy Hollow Park & Zoo:
Flow at which flooding begins: 3,500 cfs
Observed 2017 Flow: 7,300 cfs
2017 if flows contained: 7,300 cfs
Kelley Park:
Flow at which flooding begins: 4,000 cfs
Observed 2017 Flow: 7,300 cfs
2017 if flows contained: 7,300 cfs
Cooksy Family Stables:
Flow at which flooding begins: 2,500 cfs
Observed 2017 Flow: 7,300 cfs
2017 if flows contained: 7,300 cfs
San Jose Water Company Tully Road Station:
Observed 2017 Flow: 7,300 cfs
2017 if flows contained: 7,300 cfs
Reach 8
Margaret Street
Story Road
Clemence Avenue
N Laghlin
Roberts Av
S 12th Street
S 11th Street
Senter Road
Nordale Avenue
Monterey Road
Phelan Avenue
Wool Creek Drive
Tully Road
S 10th Street
Coyote Creek
280
101
February 2017 Inundation Extent
Breakout Location/Direction
Railroad
VTA
CALTRAIN
Southern Pacific
Western Pacific
N
W
E
S
0
0.25
0.5
0.75
1
Miles



Rock Springs Community/Bevin Brook Dr



Feasible Rough Order of Magnitude Cost Estimate for entire Project

$ 40 M*

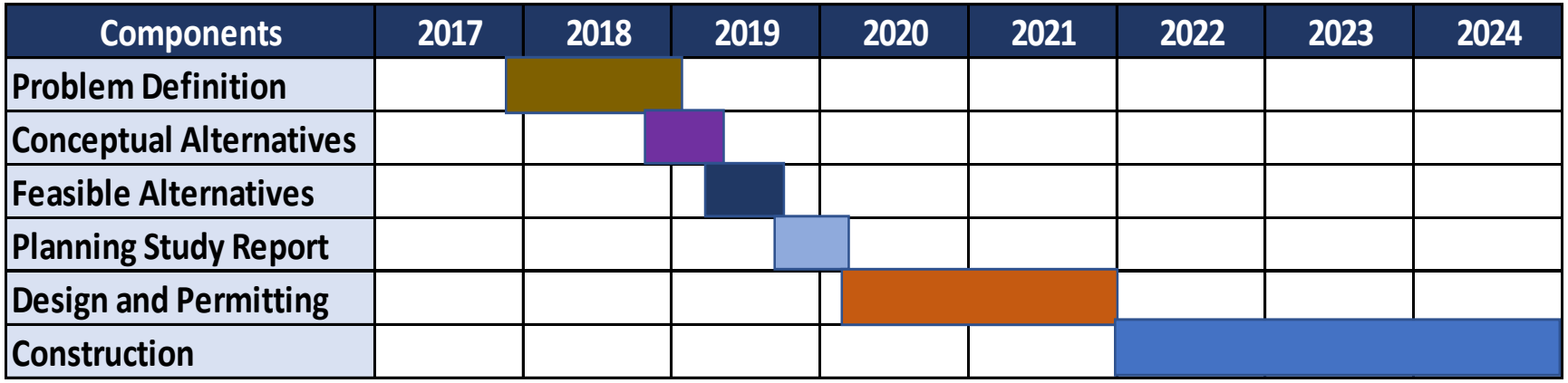
- Reach 4: 4 M
- Reach 5: 7 M
- Reach 6: 8 M
- Reach 7: 15 M
- Reach 8: 4 M

$ 85 M*

- Reach 4: 16 M
- Reach 5: 22 M
- Reach 6: 15 M
- Reach 7: 22 M
- Reach 8: 10 M

Project Components, Status and Timeline

Expedited Project Timeline: Assumes project alternative selected for implementation does not require extensive permitting



Santa Clara Valley Water District

File No.: 19-1084

Agenda Date: 11/18/2019
Item No.: 4.5.

COMMITTEE AGENDA MEMORANDUM

Capital Improvement Program Committee

SUBJECT:
2019 Capital Improvement Committee Work Plan.

RECOMMENDATION:
Review the 2019 Capital Improvement Program Committee Work Plan and make revisions as necessary.

SUMMARY:
Work Plans are created and implemented by all Board Committees to increase Committee efficiency, provide increased public notice of intended Committee discussions, and enable improved follow-up by staff. Work Plans are dynamic documents managed by Committee Chairs and are subject to change. Committee Work Plans also serve to assist to prepare an Annual Committee Accomplishments Reports.

The 2019 Capital Improvement Program Committee Work Plan is contained in Attachment 1. Information in this Plan document was provided by staff as follows:

Discussion of topics as stated in the Plan have been described based on information from the following sources:

- Items referred to the Committee by the Board;
- Items requested by the Committee to be brought back by staff;
- Items scheduled for presentation to the full Board of Directors; and
- Items identified by staff.

ATTACHMENTS:
Attachment 1: 2019 CIP Committee Work Plan

UNCLASSIFIED MANAGER:
Michele King, 408-2630-2711

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CIP Committee 2019 Workplan

	Jan 3	Jan 14	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	21-Oct	24-Oct	Nov	Dec
CIP Implementation														
Public Private Partnership (P3) Delivery for projects														
Safe, Clean Water Projects Implementation				X	X					X		X	X	
Presentation on Design-Build		X												
Project Labor Agreement			X	X	X		X	X			X			
Construction Management Resource Needs			X											
Calero Dam Seismic Upgrade and Water Reliability Analysis	X			X										
Employee Workspace Study				X										
Capital Project Monitoring														
Construction		X			X				X				X	
Design			X				X			X				X
Planning/Feasibility	X			X				X				X		
Upcoming Consultant Agreements and Amendments	X	X		X			X	X	X	X				
Project Planning Studies for Board Review/Approval												X		
CIP Development														
Preliminary CIP	X											X		X
Project Validation Process									X	X				

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