

**ALAMEDA POINT
MASTER INFRASTRUCTURE PLAN
ADDENDUM SHEET**

The Final Master Infrastructure Plan (MIP) for Alameda Point will incorporate the following addendums to the Updated Draft MIP, dated October 31, 2013.

I. EXECUTIVE SUMMARY

Revise all references of 18-inches of built-in sea level rise protection to 24-inches.

Remove “initial” and near-term” references to the flood protection system.

Add sentences in paragraph 5, after sentence 2, “The 24-inches of sea level rise protection will be provided by a system of perimeter levees surrounding the Development and Reuse Areas. The timing of the construction of the comprehensive levee system is subject to adequate funds being generated through the Alameda Point development impact / infrastructure fee program and other potential public and private sources of funds. It is anticipated that it will take multiple years to accumulate the required funding to construct the levee system. Therefore to facilitate initial phases of development, the Development Areas will also be raised to an elevation that provides built-in protection from 18 inches of sea level rise.”

II. INTRODUCTION AND PURPOSE

I. Backbone Infrastructure Costs & Value Engineering

Revise sentence 1 in paragraph 1, “The backbone infrastructure for Alameda Point described in the MIP is estimated to cost approximately \$550 to \$600 million.”

Revise the Town Center Sub-Phase 1A scenario to include 32 acres of developable area and have backbone infrastructure costs estimated at \$62.7 M.

III. DEMOLITION AND PRESERVATION

C. Environmental Remediation

Add sentence in paragraph 5, before last sentence, “Additional measures, such as slurry walls, may be required to preclude the migration of groundwater contamination during the construction dewatering process associated with utility installations.”

Add last paragraph stating, “There are existing Industrial Waste Lines within the Reuse Areas that have potential low-levels of radiation contamination. These existing pipelines may be abandoned in place through the Navy’s remediation efforts, although this is still under discussion between the Navy and environmental regulatory agencies. In the case that new utility or street construction encounters these lines, special contractor qualifications and procedures will be required.”

Revise Figure 8 to depict the updated locations of utilidors and slurry walls based on the most recent information available regarding the Navy's remediation efforts. (See attachment)

IV. FLOOD PROTECTION AND SITE GRADING

Revise all references of 18-inches of built-in sea level rise protection to 24-inches.

Remove "initial" and near-term" references to the flood protection system.

A.2 Benchmarking Sea Level Rise Criteria

Revise sentence 3 in paragraph 2, "Levees will also require an additional 1-foot of protection above this criteria, as freeboard, providing additional factor of safety and protection."

A.3 Proposed Sea Level Rise Protection

Add sentence in paragraph 2, after sentence 1, "The MIP assumes that both the Development and Reuse Areas will be protected from potential flooding sources and sea level rise."

Revise sentence 2 in paragraph 2, "Accordingly, the Development Areas are proposed to be protected by a perimeter levee with built-in protection from 24-inches of sea level rise as well as raising the inland areas to a minimum elevation that provides built-in protection from 18-inches of sea level rise."

Add sentence to the end of paragraph 2, "Lastly, the MIP recommends that permanent land uses shall not be placed in the FEMA designated 100-year flood zones without the necessary flood protection measures being implemented."

A.5.b. Development Areas

Replace the paragraph 1 with, "The Development Areas will be protected by a perimeter levee system that is designed to provide built-in protection for 24-inches of sea level rise. The timing of the construction of the comprehensive levee system is subject to adequate funds being generated through the Alameda Point development impact / infrastructure fee program and other potential public and private funding sources. Accordingly to facilitate initial phases of development, the inland Development Areas will also be elevated to provide built-in protection from 18-inches of sea level rise. The minimum elevations of the inland Development Areas will be designed to be at or above the 100-year tidal elevation plus 18-inches of sea level rise. The finish floors of all new structures will be constructed 24-inches above the 100-year tidal elevation. The minimum elevations of the perimeter areas of the Development Areas will be designed to be at or above the 100-year tidal elevation, plus consideration for wave/wind run up, plus 24-inches of sea level rise plus 1-foot of additional protection (freeboard consistent with FEMA regulations for coastal levees)."

Revise sentence 7 to end with "plus 1-foot of additional protection (freeboard)."

A.6. Site Grading Design Criteria

Update Table 5 to reflect the updated elevations. (See attachment)

Revise Figures 11, 13 and 14 to depict updated initial flood protection system. (See attachment)

A.10. Earthwork Quantities

Revise the estimated quantity of fill to be 1,900,000 cubic yards and the estimate quantity of import material to be 1,875,000 cubic yards.

Add sentence to paragraph 1, after sentence 4, “Barging the required import material to the site is preferable, such that environmental impacts are minimized.”

C. Value Engineering Opportunities

Add last paragraphs, “The MIP evaluated an additional value engineering alternative of not stabilizing the northern shoreline. This would eliminate the construction costs associated with the shoreline stabilization measures. However, this alternative would require that the critical infrastructure within the potential zone of deformation be relocated. The infrastructure that would be relocated includes Pump Station R, the 20-inch force main and Main Street. Also, there would be approximately 52 acres of land within the potential developable area or Sports Complex area that would be within the zone of deformation and could not be utilized for permanent improvements. Lastly, this alternative would allow a potential seismic hazard to be unmitigated which could have impacts to the adjacent Oakland / Alameda Estuary and the Port of Oakland’s shipping channel. Accordingly, this alternative is not recommended to be implemented.”

In regards to the flood and sea level rise protection system, additional alternatives may be pursued and evaluated depending on the future development proposals. For example, if development is set back from the shoreline an adequate distance, then the wind/wave run up component of the flood protection criteria could be avoided. This may be feasible along the southeastern shoreline where the wind / wave run up is estimated to be larger than the remainder of the site. Another alternative example could include a scenario that includes a large development area proposal that could commit to building a comprehensive levee system surrounding the subject area as an initial phase improvement. In this case, the raising of grades for development areas interior to that levee system could be avoided. In summary, alternative flood protection measures and systems may be proposed and are subject to the approval of the Public Works Director, such that the alternatives meet the design parameters outlined in the MIP, specifically that 24” inches of sea level rise protection is built in.

V. STREET SYSTEM

B. Proposed On-Site Street System

Add new paragraphs at the end of the section,

“The alignment and configuration of Orion Street north of the Town Center Sub-District is subject to future planning efforts during the preparation and processing of the Main Street Neighborhood Master Plan.

The proposed street system includes the reconstruction of Main Street, reducing from 4 travel lanes to 3 travel lanes and incorporating a protected bikeway and widened pedestrian trail. As part of the Main Street improvements, the Main Street / Pacific Avenue / Central Avenue intersection will be reconfigured to eliminate the significant offset in the north-south direction. The intersection reconfiguration will either include the construction of a round-about or the realignment of Central Avenue to the west in alignment with Main Street.

Additionally, as the proposed street improvements for Central Avenue extend to the southeast, the intersection of Central Avenue / Lincoln Street / West Ticonderoga Avenue will also need to be reconfigured. This intersection also has an offset due to Encinal High School’s facilities. This intersection is anticipated to be reconfigured to align the intersection at the existing Lincoln Street / Central Avenue intersection or as accepted by the Public

Works Director. This will require acquisition of right-of-way from the Alameda Unified School District (AUSD). The feasibility of these intersection realignments will require further evaluation and coordination with various stakeholders, including the surrounding residences, AUSD and adjacent proposed developments. See Figure 28.1 depicting a conceptual alignment of Main Street, Central Avenue and the intersection configurations described above.”

Revise Figure 23, West Atlantic Avenue to reflect the current concepts from the Town Center and Waterfront Precise Plan, which will ultimately be finalized in the final Precise Plan document. (See attachment)

Add Figure 23, West Redline Extension. (See attachment)

Add Figure 28.1, Central Avenue Concept. (See attachment)

C.2. d. Ferry Service

Remove “frequent”.

D. Proposed Off-Site Street Improvements

Revise the following listed improvements to be consistent with FEIR mitigation measures, as follows, all others are to remain:

- Project Improvements – Bicycle Improvements
 - Stargell Avenue Class I or II Improvements – Main Street to 5th Street
 - Main Street Class I or II Improvements – Stargell Avenue to Pacific Avenue
- Project Contributions (Pro-Rata Share) – Vehicle Improvements
 - Broadway / Otis Drive – Signal Improvements
 - Island Drive / Otis Drive / Doolittle Drive – Signal Improvements
- Project Contributions (Pro-Rata Share) – Transit Improvements
 - Park Street Transit Improvements – Blanding Avenue to Otis Drive
 - RAMP Transit Improvements – Main Street to Webster Street
 - Stargell Avenue Transit Improvements – Main Street to 5th Street
- Project Contributions (Pro-Rata Share) – Bicycle Improvements
 - Oak Street Bicycle Boulevard – Blanding Avenue to Encinal Avenue

VIII. STORMWATER SYSTEM

Revise all references of 18-inches of built-in sea level rise protection to 24-inches.

Remove “initial” and near-term” references to the flood protection system.

Update Figures 39, 40, 41 and 44. (See attachment)

XIII. PHASING AND IMPLEMENTATION

A.3 Flood Protection and Site Grading

Replace paragraph 1 of this section with the following text, “Within the Development Areas, each development phase will implement the necessary flood protection improvements and site grading to provide protection from the 100-year tidal event plus 18-inches of sea level rise. This will consist of elevating each development phase area to the required elevation and the installation of new stormwater system improvements. These improvements will be phased to match the development phases as closely as possible. In addition, each development phase will contribute to the site-wide perimeter levee system that will provide protection from the 100-year tidal event, plus wave/wind run-up, plus 24-inches of sea level rise and 1’ of freeboard. The timing of the construction of the comprehensive levee system is subject to adequate funds being generated through the Alameda Point development impact / infrastructure fee program and other potential public and private funding sources.”

B. Conceptual Financing Plan

Add sentence to the end of the second paragraph on page 148: “As the City finalizes its other studies and analyses, such as the impact/infrastructure fee program and the Transportation Demand Management Plan, and is closer to implementing new development, the exact amount of a feasible assessment for each type of assessment will need to be analyzed and determined.”

Update Figure 58, Phase 1A “Town Center”. (See attachment)

XIV. MIP FLEXIBILITY

Add paragraph 2, “These alternatives assume a similar development footprint as the Reuse Plan. If the development footprint was concentrated to the central portion of the project site, then the required infrastructure systems and associated costs would be significantly reduced. However, the remaining areas within the project site, but outside the concentrated development footprint, would be effectively abandoned, requiring demolition and improvements to re-establish as passive open space or these remaining areas and associated existing infrastructure systems could remain as-is and would require a high level of maintenance to continue to be operable. This condensed footprint alternative was not evaluated in the EIR or the MIP.”

B. Transit Oriented Mixed Use

Add sentence to end of paragraph 4, “This is largely due to the development footprint of this Alternative remaining consistent with the Reuse Plan.”

C. Implementation

Add sentence to end of paragraph, “Specifically, attention should be focused on evaluating the potential of implementing the infrastructure adjustments to accommodate the Transit Oriented Mixed Use Alternative as development proposals are approved. This will maintain flexibility and capacity for future land use changes.”

XV. ESTIMATED CONSTRUCTION COSTS

A. Backbone Infrastructure Costs

Revise the Town Center Sub-Phase 1A scenario to include 32 acres of developable area and have backbone infrastructure costs estimated at \$62.7 M.

Update Table 15 – Backbone Infrastructure Construction Costs. (See attachment)

Add under Utility Systems:

- Installation of utilidors
- Remediation measures for encountered groundwater contamination and industrial waste lines

Add under Transportation Improvements:

- Surface Parking Lots consistent with public parking strategy as contemplated in the proposed zoning ordinance amendment and Transportation Demand Management Plan.

Add under Parks and Open Space:

- Seaplane Lagoon Frontage (based on Town Center and Waterfront Precise Plan)

C. Public Services

This section has been modified to read as follows:

Willdan Financial Services (Willdan) has prepared an analysis of the cost of providing municipal services to the project, as well as revenues for the City expected to be generated there. The analysis includes services costs and the cost of maintaining the infrastructure needed for the plan (where the City is the party responsible for providing maintenance). The fiscal analysis includes the regular (weekly, monthly, annual, etc.) maintenance costs, such as chip seal of road surfaces, but not the cost of replacement of infrastructure that is being newly constructed as part of the development of Alameda Point. Willdan has prepared an estimate of the net fiscal impact of the project.

In addition to capital improvements, the Financing Plan for Alameda Point may include fiscal mitigation measures, such as a services assessment or special tax if necessary, to ensure that the Alameda Point development does not have a net negative fiscal impact on the City.

Not included in the analysis, however, is the cost of replacement at the end of the expected lifespan of the infrastructure. As with any other infrastructure in the City, most infrastructure replacement costs are built into the rates and fees associated with services, such as water, wastewater, and electricity. This approach, in which the users pay for the eventual replacement cost of the facilities they are using, is appropriate and financially sound.

XVI. NEXT STEPS

B. Financing Plan

A Financing Plan will be developed for each individual project at Alameda Point. The Financing Plan will further evaluate the feasibility of available funding sources for backbone infrastructure and a feasible amount of each annual assessment necessary to fund relevant infrastructure, maintenance, operations and services. Additionally, the Alameda Point development infrastructure/impact fee will be established as a mechanism to collect a portion of funds from both Development and Reuse Areas for implementation of infrastructure elements with site-wide benefits.

C. FEMA - Flood Hazard Mapping

As previously, indicated, the flood zones within Alameda Point are currently not depicted on the effective FEMA flood maps because of its historic federal ownership. Now that the City of Alameda has taken ownership of the majority of Alameda Point, it is recommended that the existing flood zones are mapped and processed with FEMA. This is necessary to characterize flood hazards to future developers, private property owners, long term tenants and characterize potential flood insurance requirements. This will include preparing and processing a Letter of Map Revision (LOMR) with FEMA to establish the limits of the existing flood zones at Alameda Point.

APPENDIX G

Update the Detailed Backbone Infrastructure Construction Cost Estimate Summary to reflect the addendums outlined above.

APPENDIX H

Remove the Appendix H - Fiscal Impact Analysis for the Alameda Point as a component of the MIP. The Fiscal Impact Analysis will be processed as a separate document.

OTHER GENERAL UPDATES

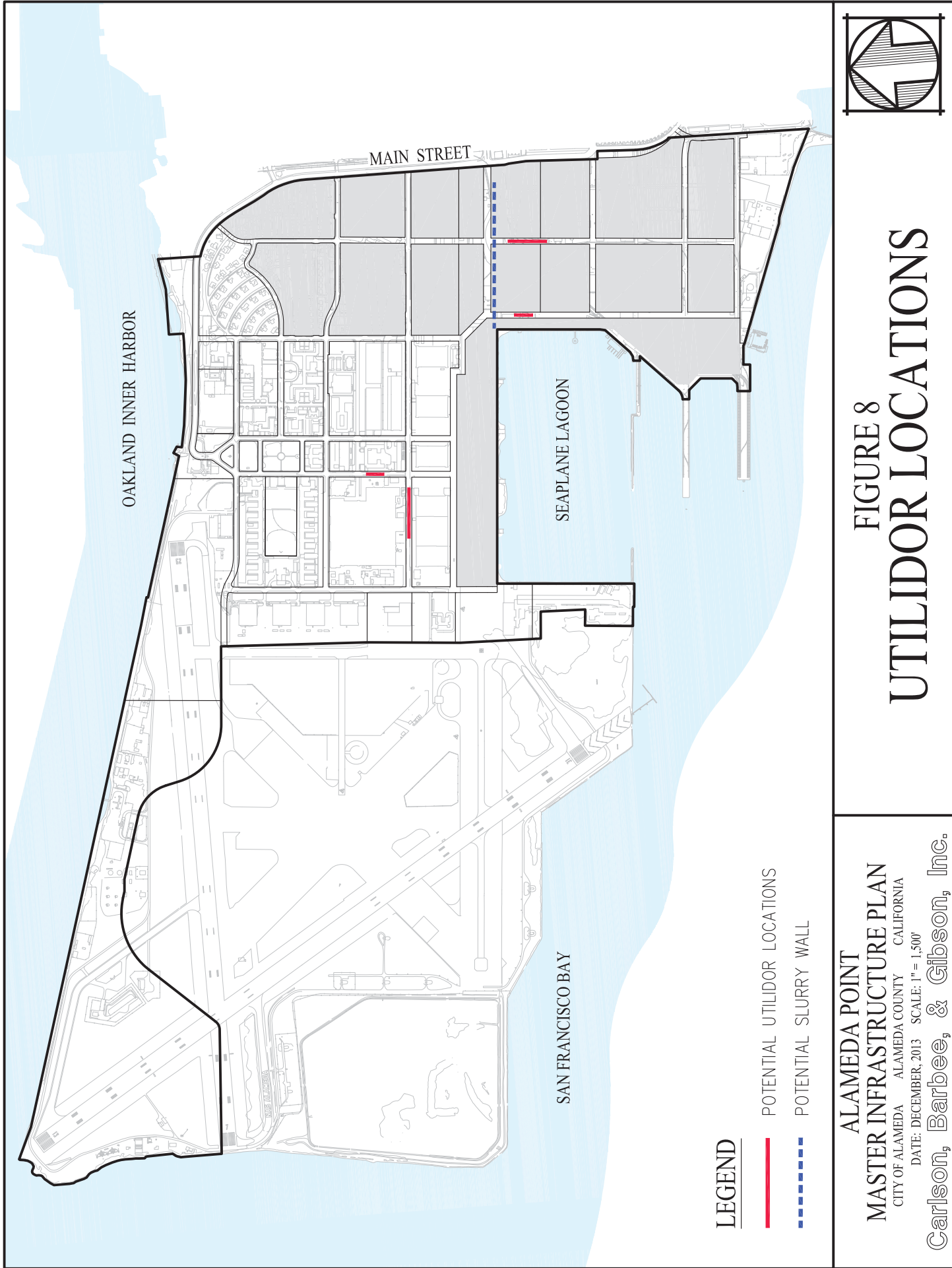
Update the Final MIP to reflect the conclusions and recommendations from the FEIR and the Town Center and Waterfront Precise Plan. This is anticipated to include the backbone infrastructure framework, street sections, transit improvements and parks and open space improvements.

Table 5 - Site Grading Design Criteria

	Location	Improvements	Min. Elev. (City Datum)	Design Criteria
Development Areas (New Construction)				
Perimeter	Eastern Seaplane Lagoon	Raise Ex Revetment	7.6	100-Year Tide +24" Sea Level Rise +1' Wind/Wave +1' Free Board
	West & North Project Boundary	Raise Ex Headwall or Revetment	7.6	100-Year Tide +24" Sea Level Rise +1' Wind/Wave +1' Free Board
	Existing Piers	Raise Ex Floodwall	10.6	100-Year Tide +24" Sea Level Rise +4' Wind/Wave +1' Free Board
	Southeast Project Boundary	Raise Ex Revetment	10.6	100-Year Tide +24" Sea Level Rise +4' Wind/Wave +1' Free Board
Inland	Areas Adjacent to Main Street	Raise Finish Grade	5.1	100-Year Tide +18" Sea Level Rise
Reuse Areas				
Perimeter	West & North Project Boundary	Construct Berm or Raise Ex Revetment	7.6	100-Year Tide +24" Sea Level Rise +1' Wind/Wave + 1' Free Board
Inland	Existing Areas to Remain	Existing Elevations to Remain	-	Existing Elevations to Remain As Is
Main Street				
Reconstruction	NW Alameda Ferry Terminal Parking Lot Entrance to Atlantic Ave.	Raise Main Street	3.6 - 7.6	

Table 15 - Backbone Infrastructure Construction Costs

	Description	PHASE 1	PHASE 2	PHASE 3	TOTAL
	BACKBONE INFRASTRUCTURE				
1	DEMOLITION / SITE PREPARATION	\$33,919,000	\$42,064,000	\$2,571,000	\$78,554,000
2	ENVIRONMENTAL REMEDIATION	BY OTHERS	BY OTHERS	BY OTHERS	BY OTHERS
3	FLOOD PROTECTION AND SITE GRADING	\$45,426,000	\$40,539,000	\$26,226,000	\$112,191,000
4	DEWATERING	\$4,069,000	\$2,955,000	\$2,680,000	\$9,704,000
5	SANITARY SEWER	\$12,063,000	\$3,255,000	\$3,778,000	\$19,096,000
6	STORM DRAIN	\$12,268,000	\$8,408,000	\$9,188,000	\$29,864,000
7	POTABLE WATER	\$5,041,000	\$4,405,000	\$5,781,000	\$15,227,000
8	RECYCLED WATER	\$1,196,000	\$506,250	\$876,000	\$2,578,250
9	DRY UTILITIES	\$6,889,000	\$6,149,000	\$6,163,000	\$19,201,000
10	ON-SITE STREET WORK	\$23,521,000	\$19,904,000	\$13,411,000	\$56,836,000
11	TRANSPORTATION	\$11,197,000	\$36,285,000	\$2,391,000	\$49,873,000
12	PARKS AND OPEN SPACE	\$39,296,000	\$15,898,000	\$26,086,000	\$81,280,000
13	PUBLIC BENEFITS	\$1,250,000	\$16,038,000	\$-	\$17,288,000
	SUBTOTAL (to the nearest \$10,000)	\$196,140,000	\$196,410,000	\$99,150,000	\$491,690,000
	SOFT COSTS				
14	CONSTRUCTION ADMIN	\$6,276,000	\$6,285,000	\$3,173,000	\$15,734,000
15	PROFESSIONAL SERVICES	\$23,537,000	\$23,569,000	\$11,898,000	\$59,004,000
16	FEES	\$8,130,000	\$7,857,000	\$4,989,000	\$20,976,000
17	IMPROVEMENT ACCEPTANCE	\$785,000	\$786,000	\$397,000	\$1,968,000
	SUBTOTAL (to nearest \$10,000)	\$38,730,000	\$38,500,000	\$20,460,000	\$97,680,000
	TOTAL (to the nearest \$10,000)	\$234,870,000	\$234,910,000	\$119,610,000	\$589,370,000



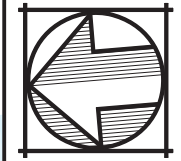
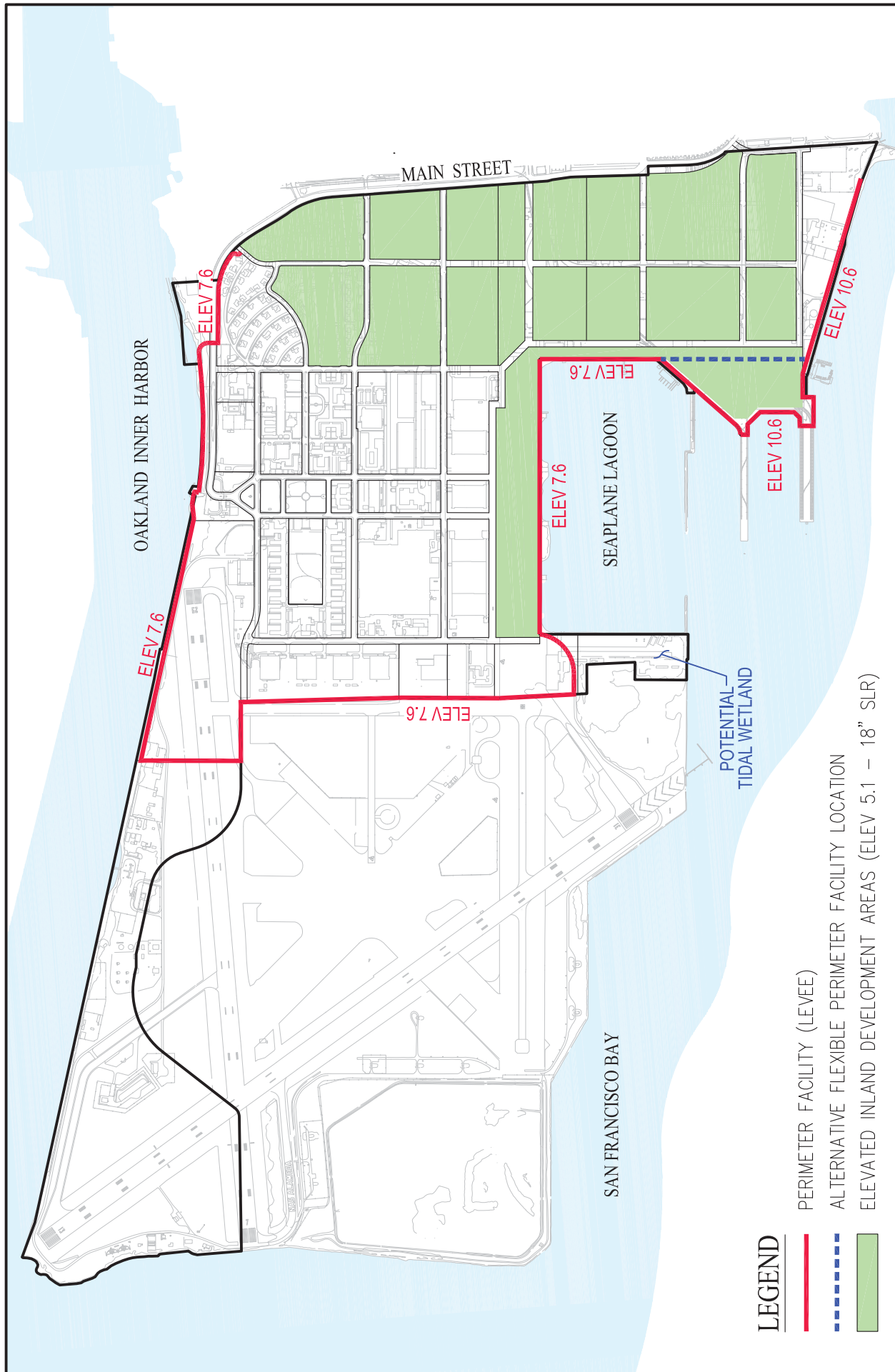
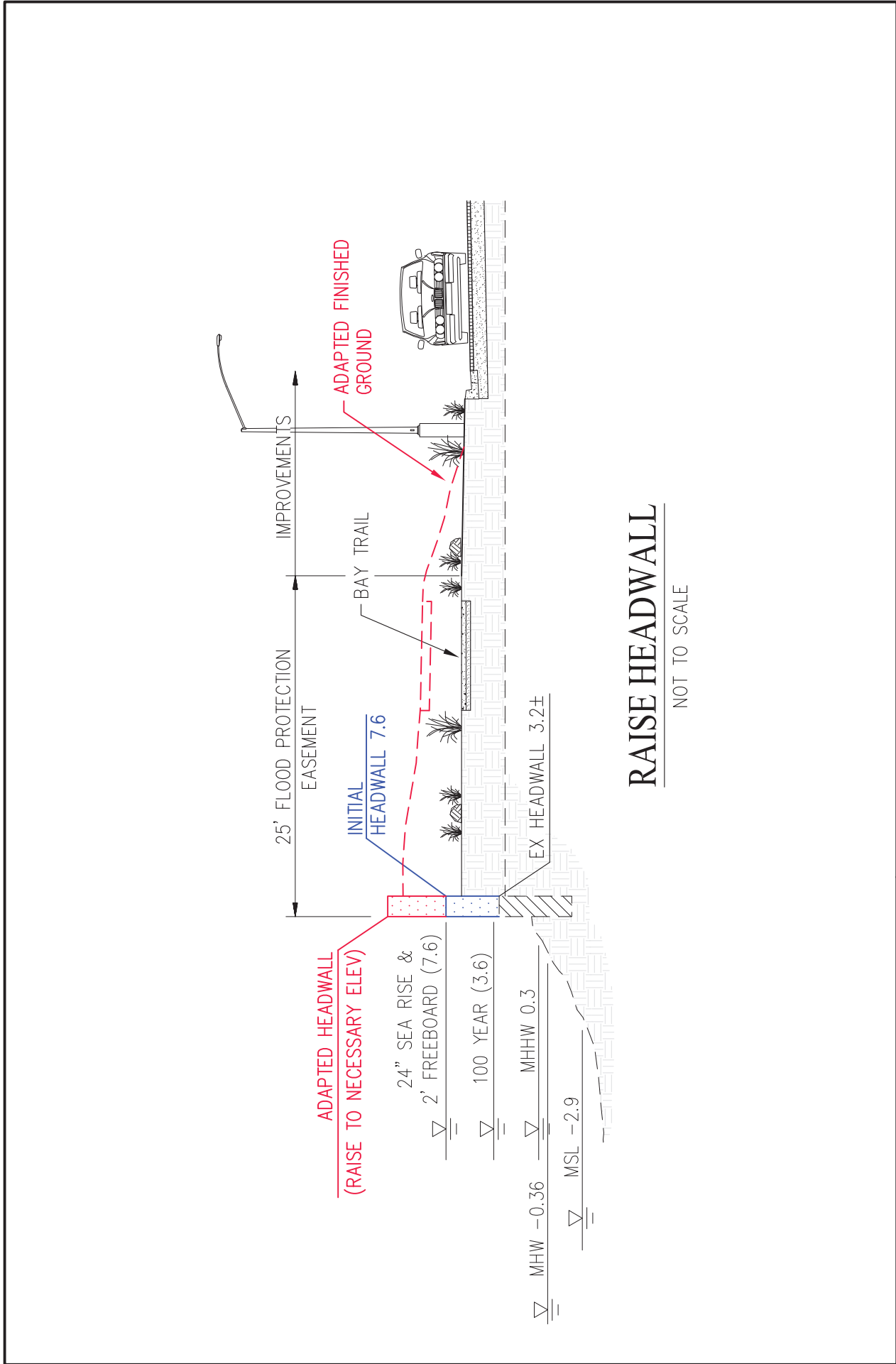


FIGURE 11 FLOOD PROTECTION 24" SEA LEVEL RISE

**ALAMEDA POINT
MASTER INFRASTRUCTURE PLAN**
CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA
DATE: DECEMBER, 2013 SCALE: 1" = 1,500'
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G:\1087-10\ACAD-10\EXHIBITS\BASE CASE ALT - FIGURES\B_11_INITIAL FLOOD PROTECTION (24"),DWG



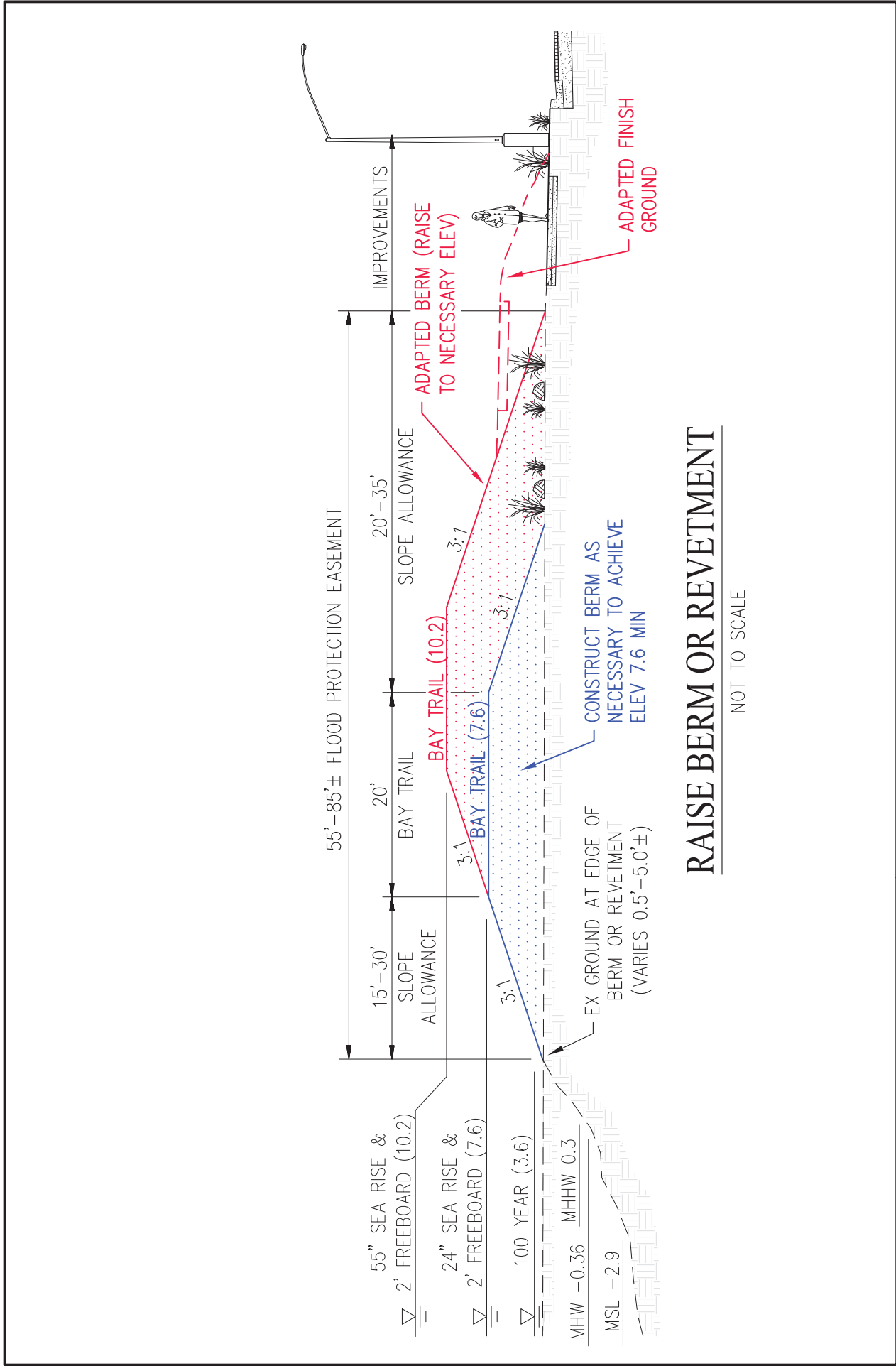
RAISE HEADWALL

NOT TO SCALE

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CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA
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FIGURE 13
FLOOD PROTECTION
ADAPTIVE MEASURES

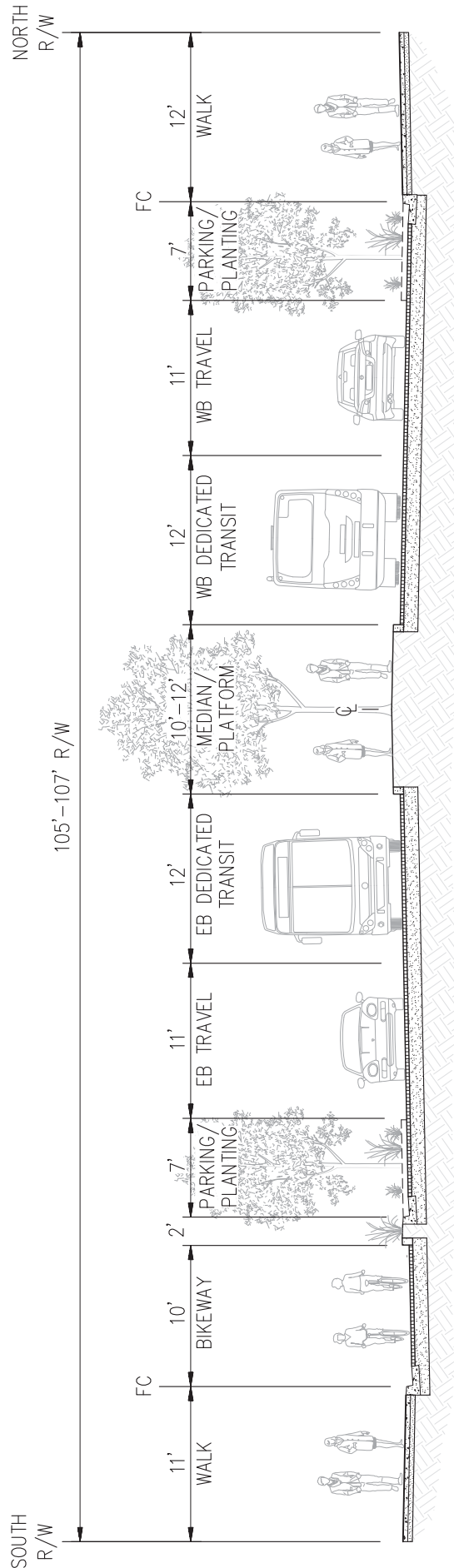
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FIGURE 14
FLOOD PROTECTION
ADAPTIVE MEASURES

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WEST ATLANTIC AVENUE

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FIGURE 23
WEST ATLANTIC AVENUE
DEVELOPMENT AREAS

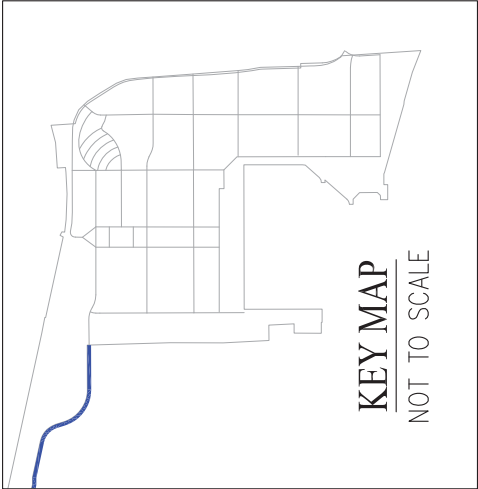
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STREET
CLASSIFICATIONS

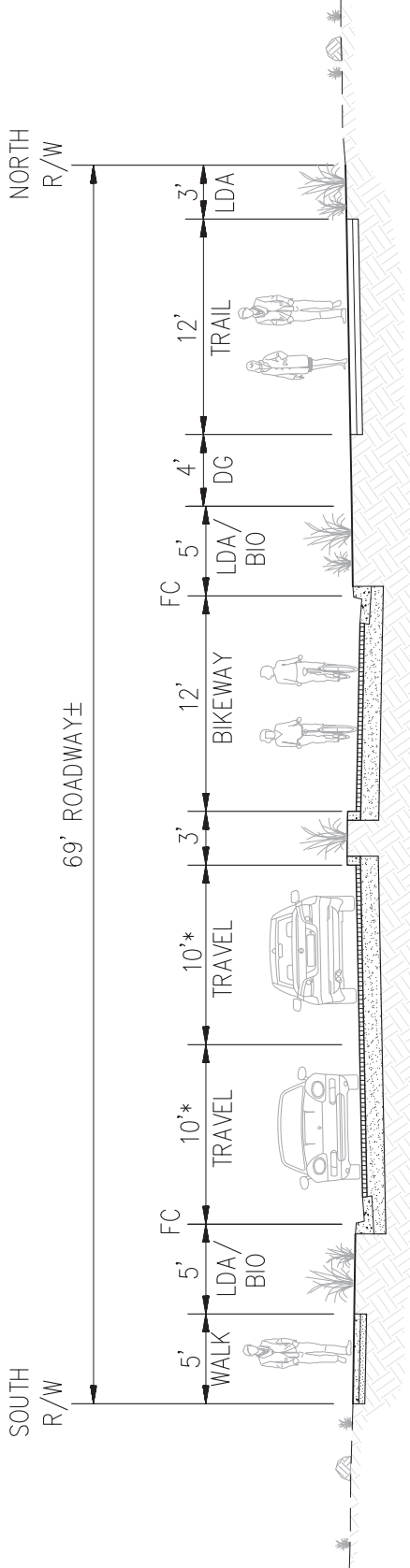
- LOCAL STREET
- CLASS 1A BIKE FACILITY

TRAVEL LANE NOTE:

TRAVEL LANES SHALL BE INCREASED TO 13' FOR STREETS ADJACENT TO BUILDINGS GREATER THAN 30' HIGH (OR AS APPROVED BY FIRE DEPT) AND SHALL BE STRIPED AS 10' LANES.



KEY MAP
NOT TO SCALE

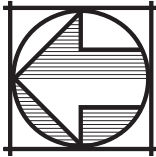


WEST REDLINE AVENUE EXTENSION

NOTE:
CROSS SECTION SUBJECT TO
COORDINATION WITH VA PROJECT.

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FIGURE 24
WEST REDLINE AVENUE EXTENSION
REUSE AREAS



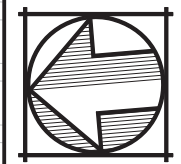
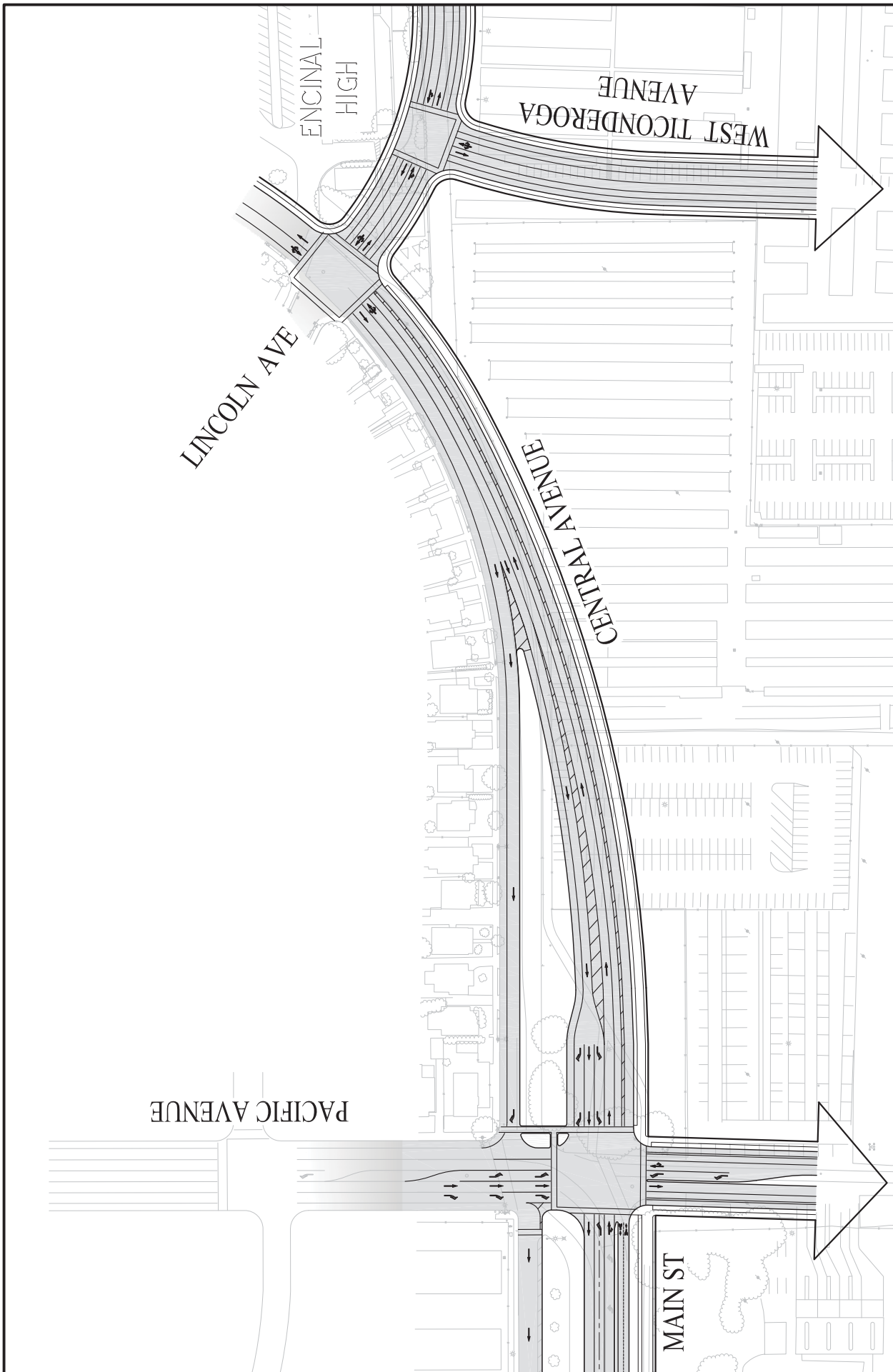
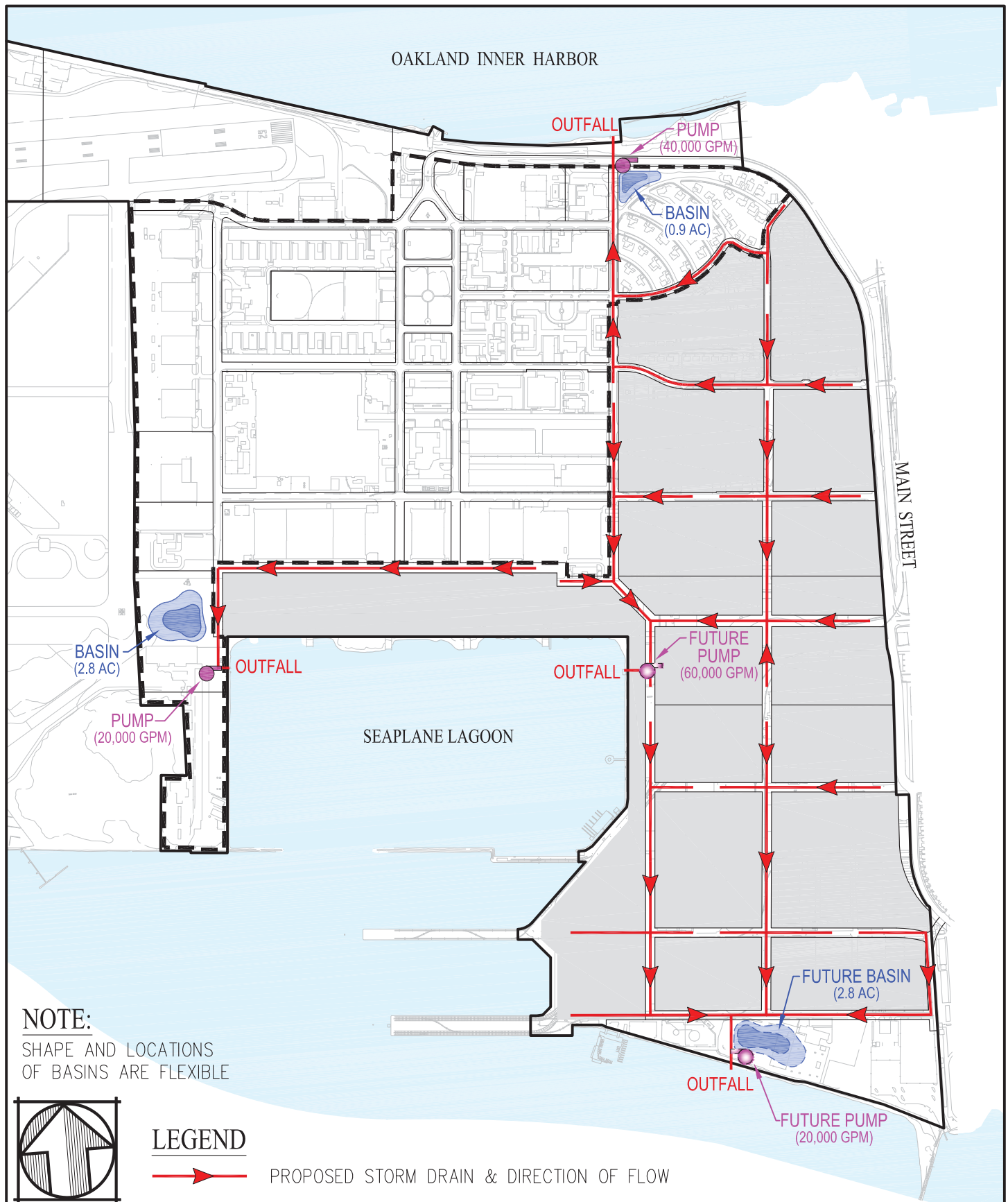


FIGURE 28.1
CENTRAL AVENUE
 CONCEPTUAL ALIGNMENT

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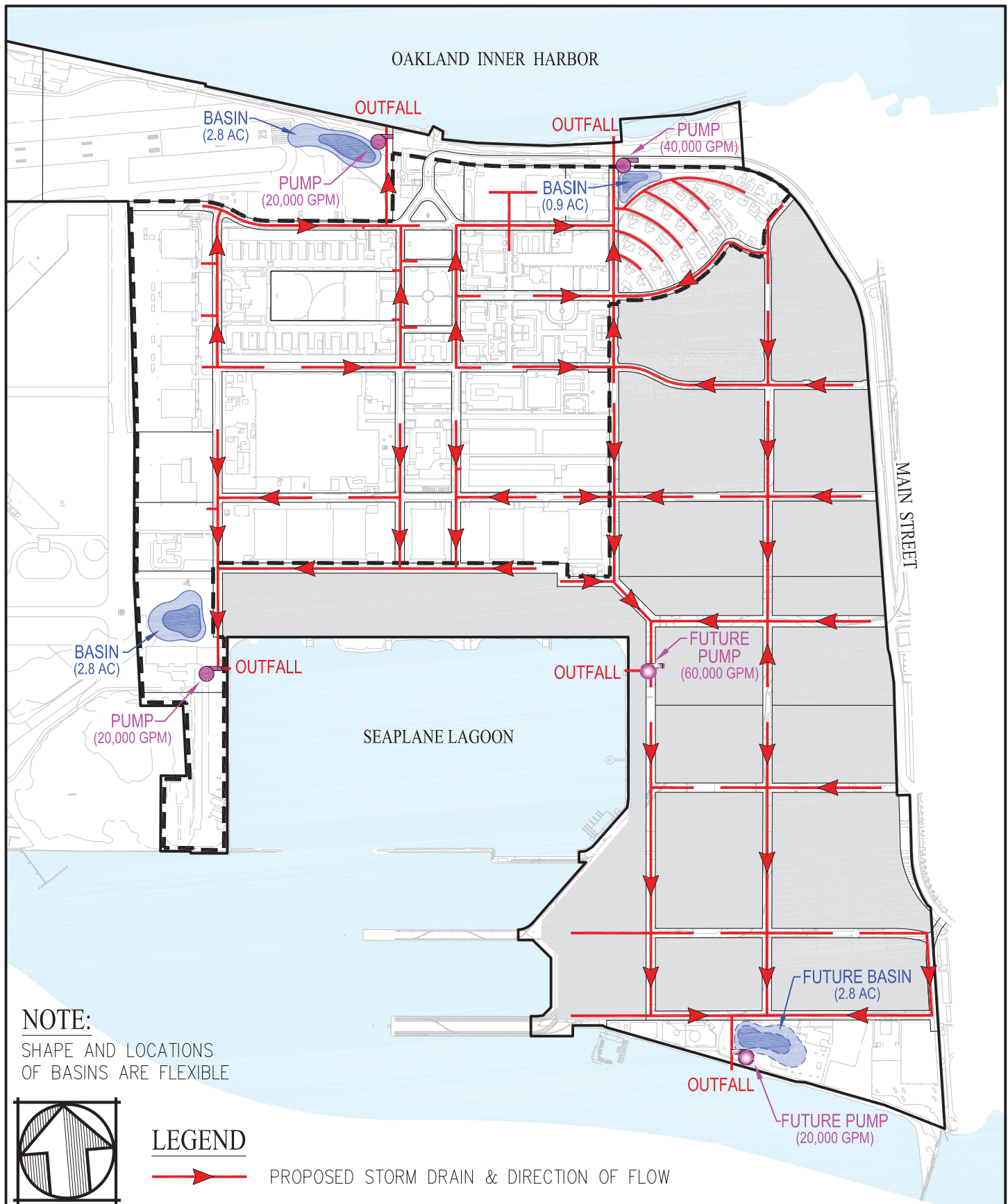
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CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

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FIGURE 39 PROPOSED STORM DRAIN IN DEVELOPMENT AREAS



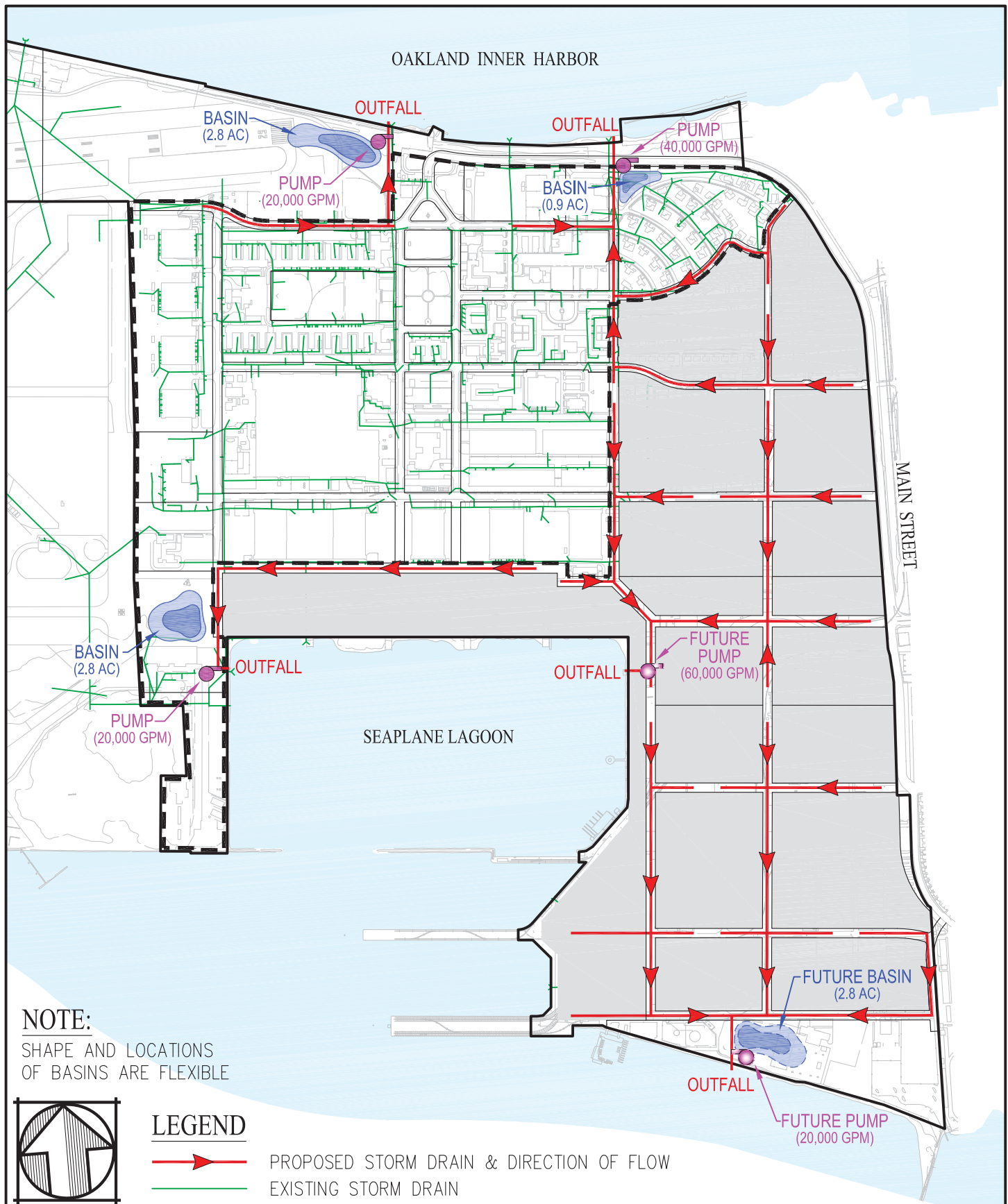
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CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

DATE: DECEMBER, 2013 SCALE: 1" = 1,000'

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FIGURE 40 PROPOSED STORM DRAIN ULTIMATE SYSTEM



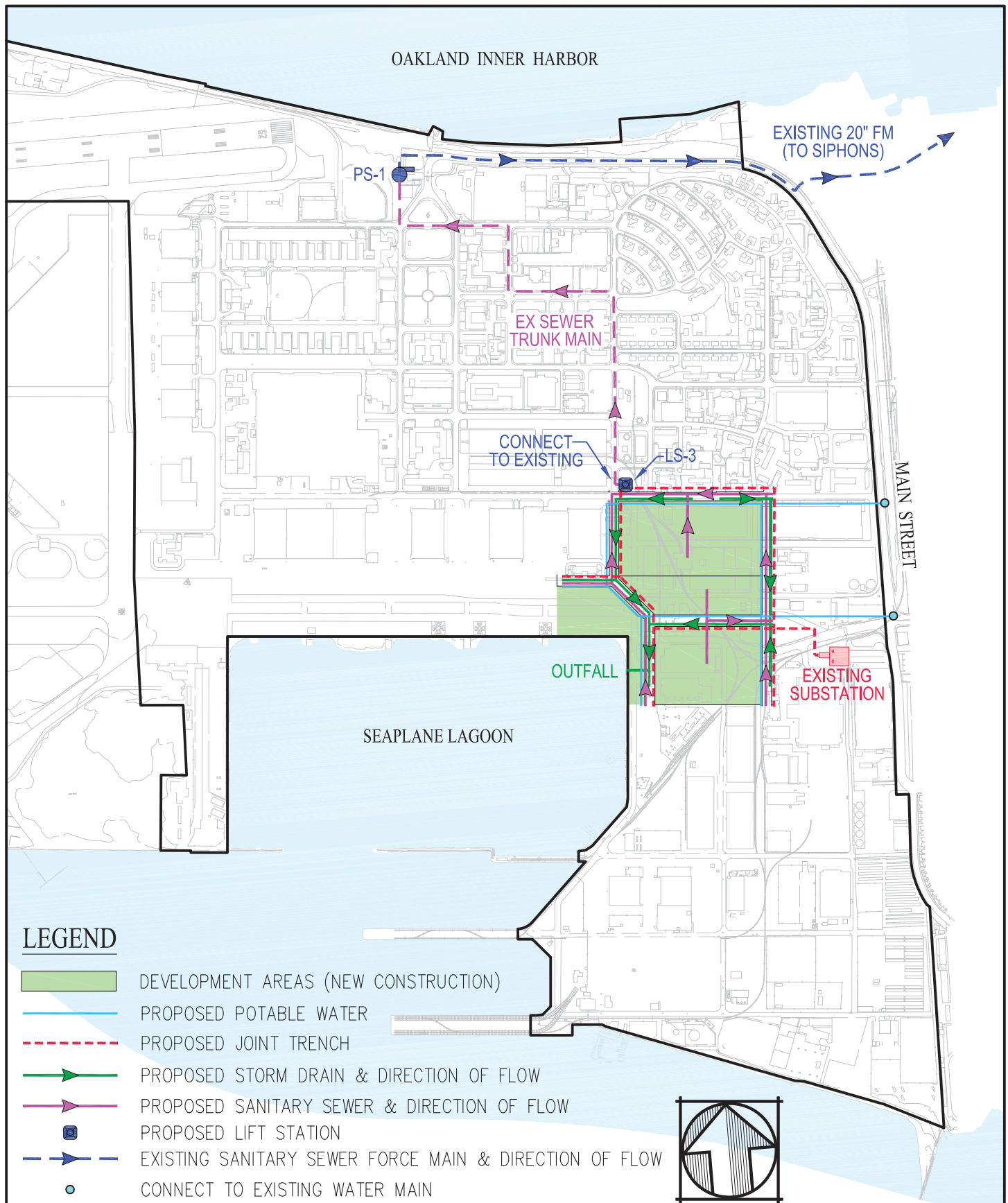
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CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

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FIGURE 41 PROPOSED STORM DRAIN REUSE AREAS INITIAL CONSTRUCTION



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CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

DATE: DECEMBER, 2013 SCALE: 1" = 1,000'

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FIGURE 58 PHASE 1A "TOWN CENTER"