

### **XIII. PHASING AND IMPLEMENTATION**

#### **A. Principles of Phasing and Implementation**

The backbone infrastructure improvements required for the redevelopment of Alameda Point will be phased to match the development phases as closely as possible. The required improvements for each phase will include demolition, flood protection, corrective geotechnical measures, site grading, utilities, streets and transit improvements. Each phase will construct the portion of infrastructure required to support the proposed uses and surrounding existing uses and to maintain financial feasibility of the project. In some cases, initial phases of development will construct components of the backbone infrastructure that also benefit subsequent phases or conversely later phases may construct infrastructure components that benefit prior phases.

The following are principles of phasing and implementation for each component of the backbone infrastructure:

##### **1. Demolition**

The demolition of existing utilities and streets will be completed in phases to match the development phases.

##### **2. Corrective Geotechnical Measures**

The northern shoreline stabilization should be completed as soon as possible in order to eliminate the existing risk of losing critical infrastructure along this corridor. At minimum, the northern shoreline stabilization will be completed prior to or concurrently with the flood protection measures along this shoreline are constructed.

The other corrective geotechnical measures, liquefaction remediation and Young Bay Mud compression, will be completed in phases to match the development phases.

##### **3. Flood Protection and Site Grading**

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 sufficient funds being generated through the Alameda Point development impact / infrastructure fee program. It is anticipated that it will take multiple years to accumulate the required funding to construct the levee system. However, the construction of the perimeter system could be accelerated if other public and private sources of funds, such as federal or State grants, are obtained.

Within the Reuse Areas, the flood protection measures will be constructed as soon as adequate funds are available, as discussed in Section XIII.B, to construct the required improvements. Until then, flood insurance policies shall be obtained by owners and tenants of existing low lying structures.

#### 4. Street System

Within the Development Areas, the construction of new on-site street improvements will be phased to match the development phases. The required timing of the off-site street improvements and implementation of the transit improvements will be outlined in the mitigation measures in the Alameda Point EIR.

Within the Reuse Areas, the rehabilitation of the existing on-site street improvements will be constructed through an enhanced maintenance program as funds permit through a fee program or grants. These streets will become part of the City's citywide pavement rehabilitation program and will be improved over time on a priority basis through this program. Additional improvements will be completed as adequate funds are generated through the fee program or available grants have been obtained.

#### 5. Wastewater System

Within the Development Areas, the construction of new on-site wastewater collection system will be phased to match the development phases. The initial development subphases will be required to construct the new wastewater facilities within that development area. These initial subphases may analyze the feasibility of utilizing the existing wastewater system from that specific development to Pump Station R. The existing system shall be inspected and televised to determine if interim rehabilitation improvements are necessary. Eventually, when there is an adequate amount of development, such that the capacity of the existing system is exceeded or as determined by the Public Works Director, the ultimate system from the development area to Pump Station R will be required to be installed.

Within the Reuse Areas, the replacement of the existing wastewater system will be incrementally completed over time as funds permit through a fee program. An enhanced maintenance program will be established to implement the interim rehabilitation of the existing facilities and the eventual replacement. Interim rehabilitation improvements will be implemented by individual development projects within the Reuse Areas. These improvements will likely include cleaning and lining of existing pipelines and manholes to address infiltration and inflow.

The ultimate replacement of the existing facilities will be completed incrementally over time as adequate funds are available, through a fee program or grants as discussed in Section XIII.B. The incremental replacements should start at the downstream portion of the system.

All new adaptive reuse projects within the Reuse Areas will replace the wastewater lateral and on-site pipelines serving that site, consistent with the City of Alameda's Private Sewer Lateral Replacement Ordinance, at the time of that project.

#### 6. Stormwater System

Within the Development Areas, the construction of new on-site stormwater collection system will be phased to match the development phases. The initial development phases will be required to construct the new downstream stormwater facilities ensuring adequate discharge to surrounding waters and flood protection. These downstream improvements will include pipeline extensions to the shoreline, multi-purpose basins, pump stations and outlets, which will benefit the subsequent phases within that watershed.

Within the Reuse Areas, the replacement of the existing stormwater system will be incrementally completed over time as funds permit through a fee program. An enhanced maintenance program will be established to implement the interim rehabilitation of the existing facilities. The initial interim improvements to be prioritized for the Reuse Areas include replacement of tide valves at the existing stormwater outfalls.

These initial improvements should be prioritized as they will eliminate the tidal waters backing up through the existing system and inundating low lying areas in a high tide event. The low lying structures will require flood insurance throughout this enhanced maintenance program period until the ultimate flood protection measures have been completed.

Additional interim rehabilitation improvements to the existing system will be implemented with available funds through a fee program, as discussed in Section XIII.B. The additional rehabilitation improvements include cleaning, lining and replacement of existing pipelines and manholes.

The ultimate replacement of the existing facilities and the implementation of the ultimate flood protection measures will be completed over time as adequate funds are available through a fee program or grants, as discussed in Section XIII.B.

## **7. Potable Water System**

Within the Development Areas, the construction of new on-site potable water distribution system will be phased to match the development phases. The new potable water system will be required to connect to and extend from the existing reliable EBMUD pipelines in Main Street.

Within the Reuse Areas, the replacement of the existing potable water system will be incrementally completed over time. The replacement of the exterior water line loop throughout the Reuse Areas shall be prioritized. This loop includes the pipelines within W. Redline Ave, Monarch Street, W. Tower Ave and Pan Am Street.

The ultimate replacement of the existing facilities will be completed over time as adequate funds are available through a fee program or grants, as discussed in Section XIII.B. The system replacements shall extend east to west, from the new reliable facilities within the Development Areas to the Reuse Areas.

All new adaptive reuse projects within the Reuse Areas will replace the potable and fire water lateral serving that site.

## **8. Recycled Water System**

Within both the Development and Reuse Areas, the construction of new on-site recycled water distribution system will be phased to match the development phases.

## **9. Dry Utility System**

Within the Development Areas, the construction of new on-site dry utility systems will be phased to match the development phases. The new electrical system will be required to connect to and extend from the existing Cartwright Substation. The new natural gas and telecommunications systems will be required to connect to the reliable systems in Main Street. The dry utilities will be constructed in a joint utility trench.

Within the Reuse Areas, the replacement of the electrical and telecommunication systems will be completed over time as funds permit through a fee program. The system replacements will be completed as adequate funds are available through a fee program or grants, as discussed in Section XIII.B. PG&E will rehabilitate and extend the existing natural gas system as necessary to serve the Reuse Areas with reliable facilities.

## 10. Service to Existing Lessees

Temporary reconfiguration of utilities and streets that are within a development phase and serve existing surrounding tenants will be required to ensure there is no disruption of service to the tenants. Temporary connections to the new systems will be required to maintain service to existing land uses. Any connection to unreliable existing infrastructure systems will need to provide the appropriate measures to protect the integrity of the new systems.

### B. Conceptual Financing Plan

As part of the planning of the MIP, the City has formulated a conceptual financing plan (CFP) to begin the work of understanding how the necessary infrastructure will be funded and constructed concomitant with development. A key concept in the Alameda Point planning efforts and the MIP is flexibility, which is also an essential element of the CFP. The CFP is designed to be incremental, linking development to infrastructure and ensuring that the right infrastructure is built, in the right amount, as development progresses. The projects and associated infrastructure will develop gradually over time, taking into account long-term needs. The financing plan for development at Alameda Point will be reviewed, evaluated, and updated as every individual project is considered and ultimately, implemented.

The infrastructure financing strategy will have three components:

- Each development site pays for on-site and site-adjacent infrastructure
- Each development site contributes its fair share to a fund for backbone infrastructure and facilities (i.e., fire station and parks) through a development impact / infrastructure fee.
- Each development submits to a Community Facilities District (CFD) assessment to pay for infrastructure.

This approach ensures that development will have the immediate infrastructure needed adjacent to the site, while also contributing to long term costs that will not be incurred until further in the development process, but to which incremental development nevertheless contributes. This linkage of development to infrastructure responsibility allows for flexibility - the development plan can respond to market forces and the infrastructure plan can adapt. Over time, the individual project sites will combine to form the overall plan, with the infrastructure and funding in place.

The plan is organized into phases, which contemplates gradual, incremental development. The phases are not prescribed in any fixed order, however, but are instead organized around geographic proximity, the logic of some infrastructure, and types of development. The phases are intended to provide an organizing principle for development, but individual phases can develop as market and other opportunities arise.

The basic sources of the financing plan will consist of the following:

- Land Sale Proceeds – funds paid to the City by developers and others for site acquisition.
- Community Facilities Districts and Assessments – assessments and special taxes paid by land owners for services and facilities.
- Infrastructure Financing District – Special district that collects incremental property tax revenue for finance capital improvements if allowed for Alameda Point by changes in State legislation.
- Infrastructure Fee – fee paid by development at building permit to pay for infrastructure improvements and City facilities.
- Public Grants and Loans – grants and other special revenues provided by third parties, such as the federal government.
- Developer Equity – developer funding of infrastructure from the anticipated profits of development.

This list may be supplemented by other sources as/if they become available. Assessments and special taxes are funded through property tax, and appear as part of each owner's property tax bill. It is important to note that a number of other special taxes and assessments are being contemplated for Alameda Point, including:

- CFD to fund public infrastructure improvements;
- CFD to fund certain City services as mitigation for any anticipated adverse impacts to the City's other funds;
- Transportation Management Association and parking district assessments to fund implementation and operations of the TDMP;
- Geological Hazard Abatement District (GHAD) to ensure a long-term source of funding for the adaptive management of sea-level rise protection; and.
- Community Benefits District assessments and Homeowner's Association fees to provide ongoing funding for basic and/or enhanced common area maintenance, marketing and special event planning, etc

Generally the sum of these taxes, plus the ad valorem tax, cannot exceed two percent of the assessed value of the property. Also, commercial uses typically maintain a lower overall tax burden than residential uses. This constraint will be taken into account as the CFP is further refined and balanced against the other needs of the project and the City. 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.

As the development plans become firmer and the first tranche of development becomes clearer the City will formulate a financing strategy that combines the needs and requirements of the overall plan with the particular circumstances of each development. The financing plan will include a balance of the above items, and will likely shift over time as the real estate and financial markets shift.

The flexibility and market responsiveness of the plan mean that the overall plan can build on success over time. Completed projects will reduce uncertainty for subsequent projects, reducing uncertainty and thereby increasing land value and reducing financing costs attributable to risk. Based on market conditions, some types and locations of development will commence ahead of others. Although this trend has been sometimes characterized as "cherry picking", in reality it is no different from how development occurs in the normal course of events. Absent a subsidy, either a master developer or the City would have to wait until individual development types and parcels are financially feasible before they could be developed. One concern, however, is that early development might occur on parcels that do not require much infrastructure or other investment to be developable. The CFP ensures that this will not happen – early development will pay not only for its immediate infrastructure but also its fair

share of larger backbone items that may not need to be constructed for several years. However, there may be non-essential improvements for a major catalyst project that may be waived or deferred until State or federal funding is available, if determined by the City Council that this meets other more important policy objectives.

Specific to the fee program, it is anticipated that a development impact / infrastructure fee will be established at Alameda Point. This fee will provide a mechanism to coordinate the funding and implementation of the components of the infrastructure that have project-wide benefit, such as transportation improvements. This fee will be collected from all development areas within Alameda Point, including those in the Development and Reuse Areas. For the Reuse Areas, there will be an additional component of this fee to coordinate the funding and repayments associated with implementing the incremental replacement of the existing infrastructure. As these funds are generated, the following improvements within the Reuse Areas and with site-wide benefit should be prioritized, in no specific order:

- Northern Shoreline Stabilization
- Perimeter Flood Protection Measures
- Wastewater Pipeline Replacements
- Exterior Potable Waterline Loop

Additionally, a GHAD will be established at Alameda Point to serve as the mechanism to monitor, maintain and implement the adaptive flood protection measures addressing future sea level rise.

The implementation of the MIP shall be consistent with the City Council Adopted Fiscal Neutrality Policy for Alameda Point.

### **C. Phase 1 - Scenario 1**

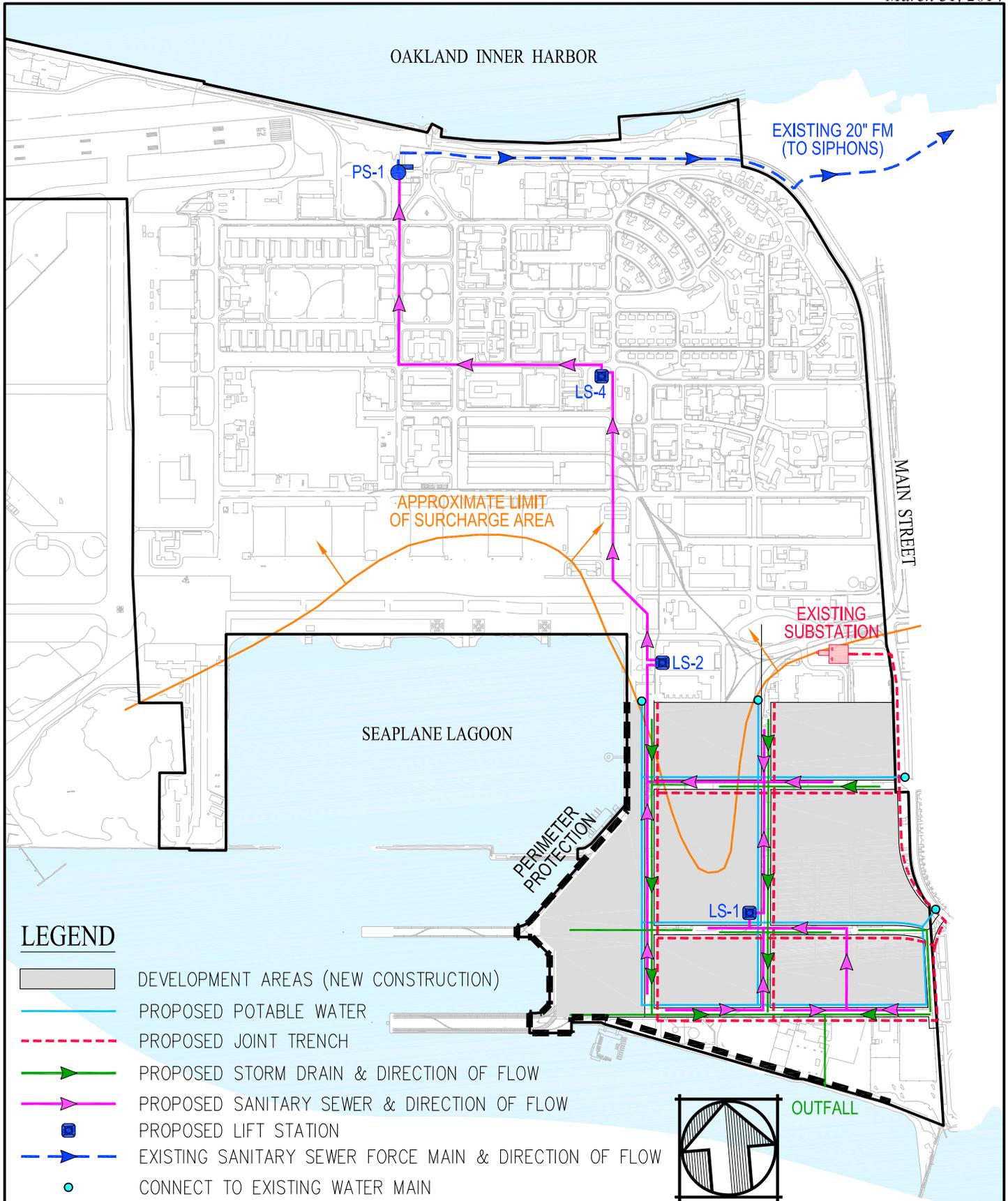
Phase 1 Scenario 1 contemplates the Enterprise Sub-District as the first phase at Alameda Point. See Figure 53 depicting this Phase 1 scenario. The following are the required backbone improvements for this scenario:

#### **1. Demolition**

- Construct temporary re-routed utility services to the active tenants and uses on the piers (MARAD) and recreation uses in Enterprise Park.
- Construct temporary access streets to the active tenants and uses on the piers (MARAD) and recreation uses in Enterprise Park.
- Demolish and recycle existing structures, utilities and streets within Phase 1 areas.

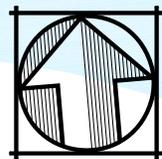
#### **2. Flood Protection and Site Grading**

- Implement the required corrective geotechnical measures, anticipated measures include:
  - DDC for liquefiable soils across Phase 1
  - Implement a surcharge operation for compressible soils within the portion of Phase 1 underlain by Young Bay Mud
- Elevate the shoreline facilities as required to achieve the minimum elevations outlined in the site grading design criteria.
- Elevate the inland areas to achieve the minimum elevations outlined in the site grading design criteria.



**LEGEND**

- DEVELOPMENT AREAS (NEW CONSTRUCTION)
- PROPOSED POTABLE WATER
- PROPOSED JOINT TRENCH
- PROPOSED STORM DRAIN & DIRECTION OF FLOW
- PROPOSED SANITARY SEWER & DIRECTION OF FLOW
- PROPOSED LIFT STATION
- EXISTING SANITARY SEWER FORCE MAIN & DIRECTION OF FLOW
- CONNECT TO EXISTING WATER MAIN



OUTFALL

**ALAMEDA POINT  
MASTER INFRASTRUCTURE PLAN**  
CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA  
DATE: MARCH, 2014 SCALE: 1" = 1,000'  
**Carlson, Barbee, & Gibson, Inc.**

**FIGURE 53  
PHASING PLAN  
SCENARIO 1**

### 3. Street System

- Construct new on-site streets within Phase 1 areas
- Construct off-site street improvements and transit system improvements as identified in the mitigation measures in the Alameda Point EIR.
- Construct temporary transitions to existing streets within surrounding areas.

### 4. Wastewater System

- Construct new on-site wastewater collection system of pipelines and lift stations within Phase 1 areas
- Construct new wastewater collection system through future phases to connect to Pump Station R.
- Construct temporary connections to the existing on-site wastewater collection system within surrounding areas.

### 5. Stormwater System

- Construct new on-site stormwater collection system within Phase 1 areas
- Construct new pipeline and outfall to the southern shoreline
- Construct water quality improvements within proposed streets and development blocks.
- Construct temporary connections to the existing on-site stormwater collection system within surrounding areas.

### 6. Potable Water System

- Construct new on-site potable water distribution system within Phase 1 areas
- Connect to the existing EBMUD pipelines within Main Street.
- Construct temporary connections with appropriate backflow measures to the existing on-site potable water system within surrounding areas.

### 7. Recycled Water System

- Construct new on-site recycled water distribution system within Phase 1 areas

### 8. Dry Utility System

- Construct new dry utility system in a joint trench within Phase 1 areas
- Construct new electrical main lines in Main Street to connect to the Cartwright Substation.
- Connect to the existing natural gas and telecommunication facilities within Main Street.
- Construct temporary connections to the existing dry utility systems within surrounding areas.

### 9. Fee Program

- Contribute to the fee program for this Development Area's fair share of project-wide improvements and community benefits.
- Document and seek reimbursements from future phases for any shared improvements constructed as part of Phase 1.

## **D. Phase 1 - Scenario 2**

Phase 1 Scenario 2 contemplates the Main Street Neighborhood Sub-District as the first phase at Alameda Point. This Sub-District includes areas within both the Development and Reuse Areas. See Figure 54 depicting this Phase 1 scenario. The following are the required backbone improvements for this scenario:

### **1. Demolition**

- Assist and support the coordination of the relocation of the Alameda Point Collaborative supportive housing to a new site.
- Construct temporary re-routed utility services to the active tenants and uses within the Adaptive Reuse and Waterfront Town Center Sub-Districts.
- Construct temporary access streets to the active tenants and uses within the Adaptive Reuse and Waterfront Town Center Sub-Districts.
- Demolish and recycle existing structures, utilities and streets within Phase 1 areas.

### **2. Flood Protection and Site Grading**

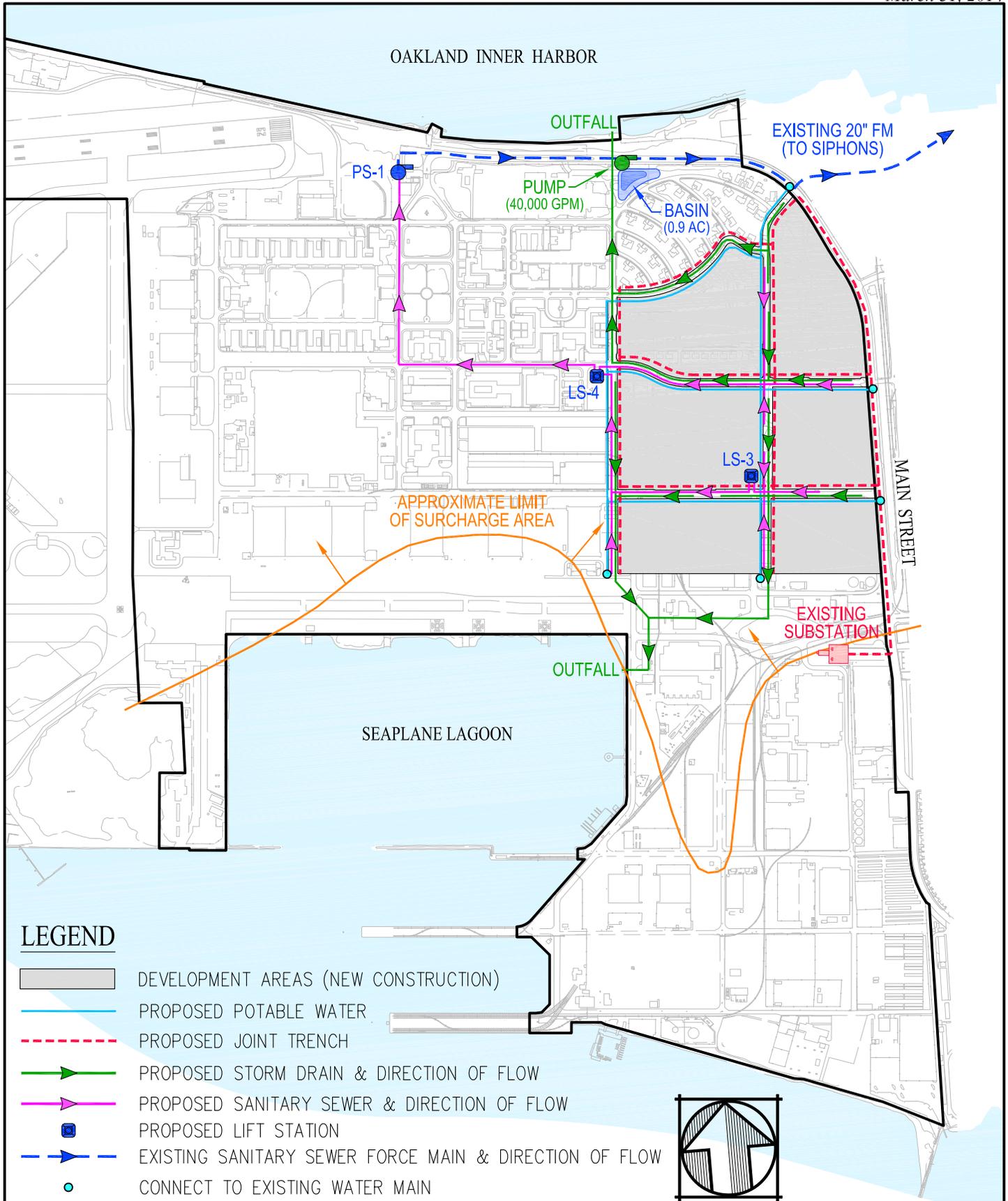
- Implement the required corrective geotechnical measures, anticipated measures include:
  - DDC for liquefiable soils across Phase 1
  - Implement a surcharge operation for compressible soils across Phase 1
- Elevate the shoreline facilities as required to achieve the minimum elevations outlined in the site grading design criteria to elevation 7.1 along the northern shoreline and 6.1 along the Seaplane Lagoon.
- Elevate the inland areas to achieve the minimum elevations outlined in the site grading design criteria, to elevation 5.1.

### **3. Street System**

- Construct new on-site streets within Phase 1 Development areas
- Construct off-site street improvements and transit system improvements as identified in the Alameda Point EIR.
- Construct temporary transitions to existing streets within surrounding areas.

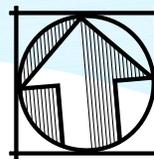
### **4. Wastewater System**

- Construct new on-site wastewater collection system of pipelines and lift stations within Phase 1 Development areas
- Construct new wastewater collection system through future phases to connect to Pump Station R.
- Construct new wastewater laterals within Phase 1 Reuse Areas (Big Whites)
- Construct temporary connections to the existing on-site wastewater collection system within surrounding areas.



**LEGEND**

- DEVELOPMENT AREAS (NEW CONSTRUCTION)
- PROPOSED POTABLE WATER
- PROPOSED JOINT TRENCH
- PROPOSED STORM DRAIN & DIRECTION OF FLOW
- PROPOSED SANITARY SEWER & DIRECTION OF FLOW
- PROPOSED LIFT STATION
- EXISTING SANITARY SEWER FORCE MAIN & DIRECTION OF FLOW
- CONNECT TO EXISTING WATER MAIN



**ALAMEDA POINT  
MASTER INFRASTRUCTURE PLAN**  
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DATE: MARCH, 2014 SCALE: 1" = 1,000'  
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**FIGURE 54  
PHASING PLAN  
SCENARIO 2**

## 5. Stormwater System

- Construct new on-site stormwater collection system within Phase 1 Development areas
- Construct new pipelines, multi-purpose basins, pump station and outfalls to the northern and Seaplane Lagoon shorelines
- Construct water quality improvements within proposed streets and development blocks.
- Construct temporary connections to the existing on-site stormwater collection system within surrounding areas.

## 6. Potable Water System

- Construct new on-site potable water distribution system within Phase 1 Development and Reuse areas
- Connect to the existing EBMUD pipelines within Main Street.
- Construct temporary connections with appropriate backflow measures to the existing on-site potable water system within surrounding areas.

## 7. Recycled Water System

- Construct new on-site recycled water distribution system within Phase 1 areas

## 8. Dry Utility System

- Construct new dry utility system in a joint trench within Phase 1 Development and Reuse areas
- Construct new electrical main lines in Main Street and W. Atlantic Ave to connect to the Cartwright Substation.
- Connect to the existing natural gas and telecommunication facilities within Main Street.
- Construct temporary connections to the existing dry utility systems within surrounding areas.

## 9. Fee Program

- Contribute to the fee program for this Development Area's fair share of project-wide improvements and community benefits.
- Document and seek reimbursements from future phases for any shared improvements constructed as part of Phase 1.

## E. Phase 1 - Scenario 3

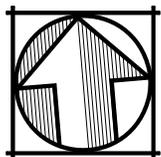
Phase 1 Scenario 3 contemplates the adaptive reuse of the Bachelors Enlisted Quarters in the Adaptive Reuse Sub-District as the first phase at Alameda Point. This development block is solely within the Reuse Areas. See Figure 55 depicting this Phase 1 scenario. The following are the required backbone improvements for this scenario:

### 1. Flood Protection and Site Grading

- Contribute to the fee program for this site's fair share amount of the require flood protection measures for the Reuse Areas.



**LEGEND**



-  REUSE AREA
-  PROPOSED STORM DRAIN (TRUNK MAIN RETROFIT)
-  PROPOSED SANITARY SEWER (TRUNK MAIN RETROFIT)
-  EXISTING STORM DRAIN
-  EXISTING SANITARY SEWER

**ALAMEDA POINT  
MASTER INFRASTRUCTURE PLAN**

CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

DATE: MARCH, 2014 SCALE: 1" = 500'

**Carlson, Barbee, & Gibson, Inc.**

**FIGURE 55  
PHASING PLAN  
SCENARIO 3**

## 2. Street System

- Contribute to the fee program for this site's fair share amount of the rehabilitation of the existing streets within the Reuse Areas.

## 3. Wastewater System

- Investigate the existing pipelines collecting and conveying the wastewater from this site.
- Construct necessary rehabilitating improvements to the existing system to address any deficiencies identified.
- Construct new wastewater laterals to structures within Phase 1
- Contribute to the fee program for this site's fair share amount of the replacement of the wastewater system within the Reuse Areas.

## 4. Stormwater System

- Contribute to the fee program for this site's fair share amount of the new downstream stormwater facilities, pipelines, multi-purpose basin, pump station and outfall to the northern shoreline.
- Contribute to the fee program for this site's fair share amount of the replacement of the stormwater collection system within the Reuse Areas.
- Construct new stormwater and water quality facilities within the development parcel.

## 5. Potable Water System

- Contribute to the fee program for this site's fair share amount of the replacement of the potable water distribution system within the Reuse Areas.
- Construct new potable and fire water services to the development parcel.

## 6. Dry Utility System

- Contribute to the fee program for this site's fair share amount of the replacement of the electrical and telecommunication systems within the Reuse Areas.
- Construct new electrical and telecommunication services to the development parcel.

## 7. Fee Program

- Contribute to the fee program for this site's fair share amount of project-wide improvements and community benefits.

## F. Sub-Phases

The sub-phases that comprise each of the Phase 1 scenarios outlined above will implement the backbone improvements generally consistent with the principles outlined above. Each sub-phase within the Development Areas will construct the new backbone infrastructure within and adjacent to that specific sub-phase. The only utility system within Development Areas that may be deferred is the installation of new wastewater facilities extending to Pump Station R. The initial phases may analyze the feasibility of utilizing the existing wastewater system from that specific development to Pump Station R. The existing system shall be inspected and televised to determine if interim rehabilitation improvements are necessary. Eventually, when there is an adequate amount of development, such that the capacity of the existing system is exceeded or as determined by the Public Works

Director, the ultimate system from the development area to Pump Station R will be required to be installed. See Figure 56 through Figure 58 depicting the conceptual infrastructure to be installed with the three illustrative conceptual sub-phases (1A).

The infrastructure improvements within the Reuse Areas will be implemented as funds permit through a fee program or grants.

## **G. Permitting**

The following are the agencies that have oversight to the backbone infrastructure at Alameda Point and will issue permits for certain components of infrastructure:

### **1. City of Alameda**

Any proposed street, storm drainage, water quality and sanitary sewer system improvements will be required to be reviewed and approved by the City of Alameda.

### **2. Alameda Municipal Power**

Any proposed improvements to the electrical, telephone or joint trench system will be required to be reviewed and approved by Alameda Municipal Power.

### **3. EBMUD**

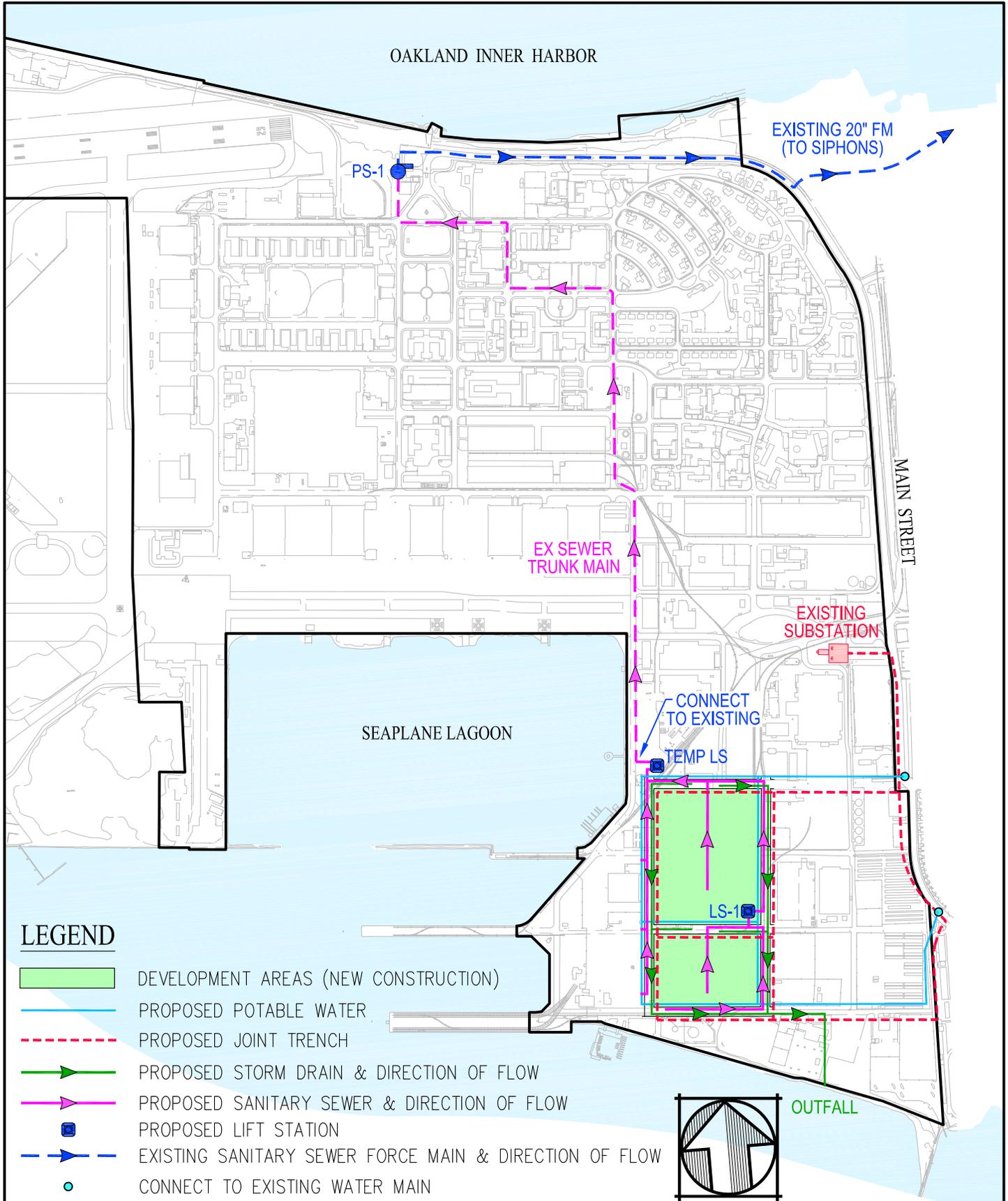
Any proposed improvements to the EBMUD owned and maintained sanitary sewer transmission facilities will be required to be reviewed and approved by EBMUD. This would include any proposed improvement to the existing Pump Station R near the Main Gate and/or the 20-inch force main.

Any proposed improvements to the potable or recycled water systems will be required to be designed, reviewed and approved by EBMUD.

### **4. FEMA**

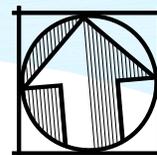
Initially, a Flood Insurance Study will be prepared and processed with FEMA to evaluate the existing conditions at Alameda Point and define the flood zones within the Project Site. The study shall be conducted for the entire Project Site. This process is currently underway through FEMA's California Coastal Analysis and Mapping Project. This study will include the shorelines of Alameda Point and define the coastal flood hazards within the project site based on regional-scale storm surge and wave models of the San Francisco Bay. The FIRM maps (panels) for the City of Alameda will be revised through this process to include Alameda Point.

At the time that design of flood protection measures is being completed, a Conditional Letter of Map Revision (CLOMR) shall be processed and approved by FEMA. The CLOMR will demonstrate FEMA's concurrence that design of the flood protection measures will remove the proposed development areas from the flood zones. Once the flood protection measures have been constructed, a field survey can be completed to document the as-built elevations of these facilities. This information will be used to process a final Letter of Map Revisions (LOMR). Once the LOMR is approved by FEMA, the FIRM panel will be revised to depict the constructed flood protection measures and remove the protected areas from the floodplain. The CLOMR and LOMR can be prepared and processed in phases with the development phasing.



**LEGEND**

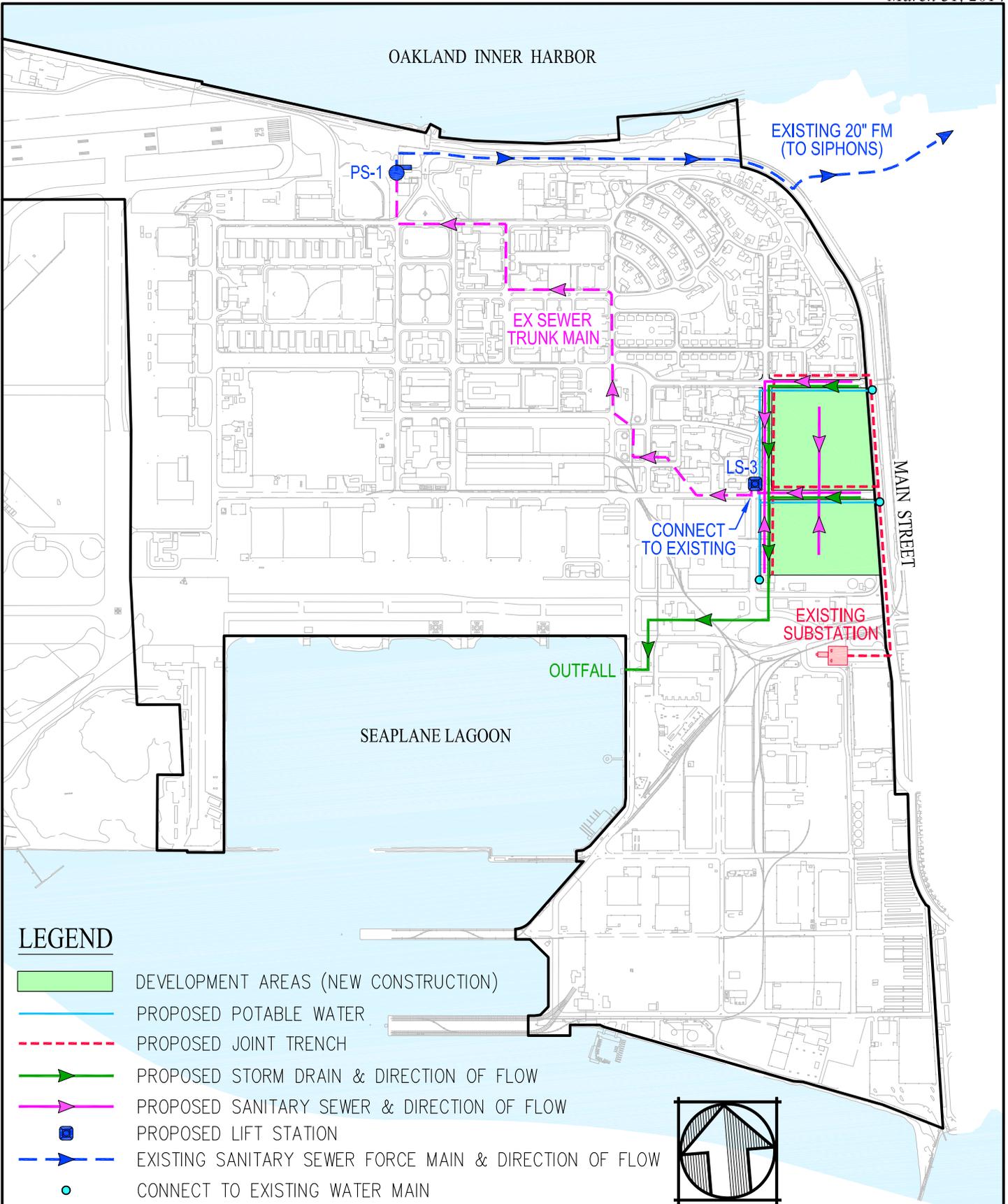
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OUTFALL

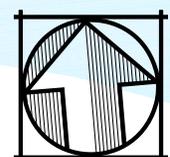
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**FIGURE 56  
PHASE 1A  
"SOUTH"**



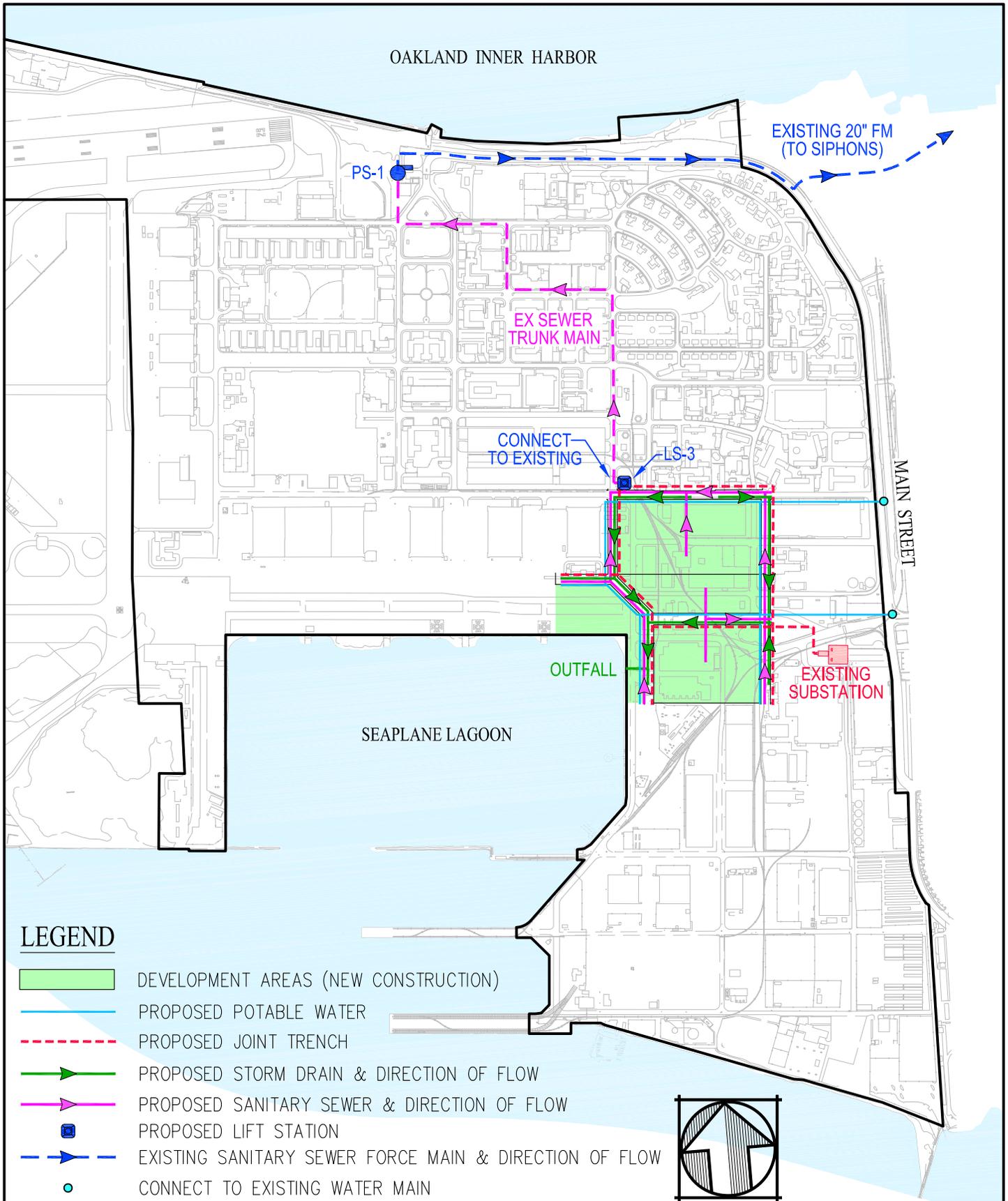
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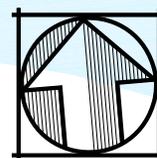
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**FIGURE 57  
PHASE 1A  
"NORTH"**



**LEGEND**

- DEVELOPMENT AREAS (NEW CONSTRUCTION)
- PROPOSED POTABLE WATER
- PROPOSED JOINT TRENCH
- PROPOSED STORM DRAIN & DIRECTION OF FLOW
- PROPOSED SANITARY SEWER & DIRECTION OF FLOW
- PROPOSED LIFT STATION
- EXISTING SANITARY SEWER FORCE MAIN & DIRECTION OF FLOW
- CONNECT TO EXISTING WATER MAIN



**ALAMEDA POINT  
MASTER INFRASTRUCTURE PLAN**

CITY OF ALAMEDA ALAMEDA COUNTY CALIFORNIA

DATE: MARCH, 2014 SCALE: 1" = 1,000'

Carlson, Barbee, & Gibson, Inc.

**FIGURE 58  
PHASE 1A  
"TOWN CENTER"**

## **5. Regional Water Quality Control Board (RWQCB)**

A water quality certification, Section 401, will be required from the Regional Water Quality Board (RWQCB) for activities within wetlands or below the ordinarily high water line. This certification will be required for the outfall construction at Alameda Point. The project need to demonstrate compliance with the water quality regulations of the MRP for the storm runoff from the Project Site. As described above, the implementation of the water quality improvements will be phased in the Development Areas and incremental in the Reuse Areas. Accordingly, it is anticipated that a site-wide water quality certification will be pursued for all outfalls and waste discharge requirements will be established for the site outlining how the water quality compliance will be achieved over time.

## **6. Army Corp of Engineers**

Any improvement within the waters of the United States shall require a permit, Section 404, from Army Corp of Engineers. This will include construction of the stormwater outfalls or any shoreline flood protection measures that require construction below the ordinary high water line. Additional consultations from other federal agencies may be determined necessary by the Army Corp of Engineers in order to issue the permit. A permit may be pursued for each separate outfall consistent with the development phasing.

## **7. BCDC**

Any improvement or proposed structure within Bay or within 100-feet of the Bay shoreline will require a permit from BCDC. A permit for each specific improvement within the 100-foot Bay shoreline may be pursued from BCDC consistent with the development phasing. Alternatively, a “major permit” may be pursued that would provide for a programmatic approval of all the proposed improvements within the 100-foot Bay shoreline. With the “major permit,” future review and permits from BCDC will be required once the specific project details are available.

## **8. US Fish and Wildlife Service**

All proposed improvements and structures shall be compliant with the active mitigation measures outlined in the Biological Opinion issued by the US Fish and Wildlife Service, the Declaration of Restrictions recorded on the Alameda Point property and a Memorandum of Agreement with the VA for lighting mitigation measures related to protecting the least turn colony within the VA Property. The City of Alameda will review all proposed improvements to ensure compliance and may request additional consultation from the Service, if necessary.