

XII. SUSTAINABILITY CONSIDERATIONS

The MIP establishes a practical yet comprehensive approach to integrating sustainable considerations with the backbone infrastructure proposed for Alameda Point. The key sustainable elements of the backbone infrastructure include creating a seismically stable site that can adapt to the potential impacts of climate change, utilize existing utility capacities available at the Project Site, harness the green infrastructure of the utility agencies serving the Project Site, conserve and restore natural resources, promote the well-being of the community through numerous active parks and open space areas and allow for future green infrastructure enhancements to be implemented within future in-tract / on-site development areas.

When constructing NAS Alameda, the Navy designed the Project Site and associated infrastructure for a limited design and service time frame. Similar to many of the historic infrastructure systems in the Bay Area, the existing infrastructure, including flood and seismic protection measures, at Alameda Point has a limited life and requires eventual replacement or enhancement. The proposed site improvements presented in the MIP rehabilitate and replace the existing infrastructure to establish reliable and protected systems. The proposed improvements will provide long term protection and future adaptability from potential rising sea levels associated with climate change. Additionally, corrective geotechnical measures will be implemented to address liquefiable soils and shoreline instability. The proposed improvements at Alameda Point transform the Project Site into a long term, flood and seismically safe community with dependable systems able to serve and protect many generations.

The historic uses at NAS Alameda required large infrastructure demands. Therefore, the Project Site offers a unique setting with large existing and available utility capacities. These include wastewater treatment by EBMUD, potable water supply by EBMUD and electrical supply from AMP. Both EBMUD and AMP have exceptional sustainable and environmentally conscious systems. As examples, EBMUD uses nearly 90% less energy to delivery water to its service area than the average water provider in California. Also, EBMUD became the first utility district in North America to operate a wastewater treatment plant that generated more renewable energy at the plant than is needed to run the facility. Similarly, AMP maintains a power portfolio that typically is comprised of 80% of renewable and clean energy sources. The backbone infrastructure at Alameda Point is proposed to continue to connect to these highly sustainable sources of infrastructure.

Other sustainable components of the backbone infrastructure include:

- Demolish and abate unusable and decrepit structures.
- Rehabilitate and re-use of historic and other usable structures.
- Re-use and recycling of on-site materials.
- Implement sea level rise adaption plan that includes monitoring and methods to provide long term protection and adapt flood protection improvements to varying amounts of sea level rise.
- Construct a new grid of “complete streets” supporting a broad range of transportation choices.
- Construct a comprehensive network of pedestrian and bicycle routes including components of the Bay Trail and the Cross Alameda Trail.
- Construct walkable streets with controlled intersections, bulb-outs and high-visible crosswalks.
- New and improved transit systems such as a shuttle/bus rapid transit, and improved ferry terminal.
- Implement Low Impact Development (LID) principles for the management and treatment of stormwater runoff with bio-swales, bio-filtration areas and other technologies to clean stormwater runoff prior to outfall to the Bay or Estuary.
- Install a new wastewater collection system reducing the amount of groundwater infiltration and wet weather flows.

The future on-site / in-tract developments and the associated construction of structures will build upon the foundation established by the backbone infrastructure and further improve the sustainability of Alameda Point. New construction at Alameda Point will be designed to conserve resources and minimize demands by utilizing water reducing fixtures and energy efficient appliances within proposed structures. Additionally, a Transportation Demand Management Plan (TDM) being developed by the City will focus on ways to reduce single occupancy vehicles and encourage the use of other modes of transportation. Examples of other sustainability features of future development are likely to include:

- Offering of transit passes to residents and employees to promote and increase the use of transit for residents and employees living and working at Alameda Point, including shuttle services.
- Provide opportunities for car and bike sharing and other TDM programs.
- Implement rain water harvesting systems that reuse stormwater as a supplemental supply of water for landscaping and other approved uses. These systems could include a rain barrel or similar type of rain water collection and storage system.
- Incorporate non-polluting renewable energy generation sources, such as solar, geothermal and / or biomass.

As sustainable technologies advance and evolve, future green and sustainable enhancements within the development sites at Alameda Point will likely become more feasible.