

# Menlo Park SAFER Bay Project

## Justification for Extended Project Duration

The Menlo Park Safer Bay Project has been split into two phases; Phase 1 is 21 months in duration and includes activities up to 90% Design, Phase 2 is 29 months in duration and includes Final Design and Construction. Eight months are provided between Phases 1 and 2 for project assessment by FEMA prior to award of Phase 2 funding. The reasons for each phase being approximately two years in duration are discussed below.

### Phase 1 Duration

The Menlo Park SAFER Bay project proposed in this application is made up of reaches of flood control levees and floodwalls that are part of a larger program called SAFER Bay. A feasibility study and conceptual designs have been completed for the SAFER Bay Program (**see Attachment 4 - SAFER Bay Public Draft Feasibility Report, Oct 2016**) and will be used as a basis for this project.

While the SAFER Bay Program feasibility study has provided a strong basis for success of the Menlo Park SAFER Bay Project, a lot of work remains to be done to bring this project to construction. As illustrated in the **attached project schedule**, following project commencement in October 2021, seven months will be required to develop the environmental project description, prepare the Notice of Preparation (NOP), and hold the public scoping meeting before 30% design can commence. That time will be used productively to commence public outreach activities, collect survey and utility information, perform aerial base mapping, and complete most of the geotechnical investigations.

After 30% design can commence in May 2022 it will take 14 months to bring the design to 90% design completion. Beyond the design complexity associated with levees and floodwalls, flood gates and water transfer structures, this duration is necessary to accommodate the stakeholder and agency coordination associated with implementing such a project with consideration for sensitive ecological habitats, major commercial and industrial facilities, a 12-lane highway, and residential neighborhoods.

### Phase 2 Duration

Once FEMA has reviewed the Phase 1 project and Phase 2 is approved to proceed, the completion of Final Design will be relatively rapid and the bulk of the Phase 2 duration will be used for construction activities. The Menlo Park SAFER Bay Project consists of four connected reaches of flood control features that parallel State Route 84 in the South San Francisco Bay Area (**see Attachment 3 - Menlo Park SAFER Bay Site Plans and Sections**). Features to be constructed include almost four miles of engineered levees, ecotone levees, floodwalls, and floodgates.

Construction activities will involve removal from the site of approximately 170,000 cubic yards of excavated material, and import to the site of approximately 780,000 cubic yards of levee fill material. It can be reasonably expected that the project will require approximately 45,000 truck trips just for removal of waste excavation and import of levee fill. Additionally, the project will require significant traffic of concrete, structural and mechanical components, and supporting trades. Extending the construction schedule over two years will reduce the daily haul truck activity in local communities and on the busy highway and thus a) reduce congestion, b) increase safety, c) reduce noise pollution, and d) reduce air quality impacts.

The construction cost estimate for this project assumes that a portion of the levee fill will be sourced at no cost. This is based on recent experience with similar projects in the local area. No-cost fill is usually sourced from nearby construction and development projects that would otherwise pay to dispose of their excavated materials. Development in the South San Francisco Bay Area continues to be rapid and it is anticipated that sufficient no-cost fill will be available to support construction of this project if construction is performed over two years. If construction is scheduled for one year, there is a possibility that sufficient no-cost fill will not be available to complete the project in one year.