

4.1 Introduction

State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to a project that could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant environmental impacts. According to the State CEQA Guidelines, the EIR should compare merits of the alternatives and determine an environmentally superior alternative. The range of alternatives discussed in an EIR is governed by the “rule of reason,” which requires the identification of only those alternatives necessary to permit a reasoned choice between the alternatives and the proposed project. An EIR need not consider an alternative that would be infeasible. State CEQA Guidelines Section 15126.6(f)(1) explains that the evaluation of project alternative feasibility can consider “site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site.” The EIR is also not required to evaluate an alternative that: (1) has an effect that cannot be reasonably identified or that has remote or speculative implementation and (2) would not achieve the basic project objectives.

4.2 CEQA Alternatives

Pursuant to the CEQA requirements identified in Section 4.1 above, alternatives to the Proposed Project were developed for this EIR that would obtain many or most of the objectives of the Project and would avoid or substantially lessen one or more of the Proposed Project’s significant environmental impacts.

The basic objectives of the Proposed Project are:

- Prevent potential impacts on human and environmental health caused by sewage spills from the existing Venice Pumping Plant during extreme wet-weather events;
- Increase reliability to the system by providing redundancy to pumping capacity to improve system reliability and to allow regular service and maintenance activities to take place without compromising the ability of the City of Los Angeles (City) to maintain pumping capacity and minimize the risk of sewage overflows; and
- Address future risks related to climate change, including increased storm intensities and sea level rise, which have the potential to result in flows that would be beyond the capacity of the existing VPP.

The Proposed Project would result in the following significant and unavoidable impacts:

- Noise and Vibration – during construction activities, impacts related to noise and vibration would be significant and unavoidable, despite the application of mitigation measures.

- Land Use – during construction activities, secondary impacts to surrounding land uses would occur related to noise and vibration. These impacts would be significant and unavoidable, despite the application of mitigation measures.

Based on the above, the following alternatives to the Proposed Project have been identified:

- No Project/No Build Alternative
- Alternative 1 – Construct Venice Auxiliary Pumping Plant and Permanently Vacate Hurricane Street between Canal Court and Esplanade

These alternatives are described below.

4.2.1 No Project/No Build Alternative

As required by CEQA Guidelines Section 15126.6 (e), under the No Project/No Build Alternative, the Proposed Project would not be implemented. The existing Venice Pumping Plant (VPP) would operate in its current condition with normal and planned upgrades and maintenance. Rental of temporary pumps and associated piping and back-up generators would be undertaken, as needed to address extreme wet-weather or dry weather events and/or when existing pumps are either down or undergoing maintenance (up to three pumps and two diesel generators). As in the past, temporary pumps and piping would be located at-grade within Hurricane Street between Canal Court and Esplanade. There is a minimum three-week set up time to bring the equipment on-line. Hurricane Street (between Canal Court and Esplanade) would be closed to the public during this time period. The equipment would operate 24 hours per day.

4.2.2 Alternative 1 – Construct Venice Auxiliary Pumping Plant and Permanently Vacate Hurricane Street between Canal Court and Esplanade

This alternative would be identical to the Proposed Project, except that Hurricane Street would be permanently vacated between Canal Court and Esplanade. Both coastal access and existing parking would be eliminated and no public access to the Venice Auxiliary Pumping Plant (VAPP; Proposed Project) or existing VPP would be allowed. The site would be fenced and controlled via secured and gated access.

4.2.3 Alternatives Considered but Rejected As Infeasible

Section 15126.6(c) of the State CEQA Guidelines requires EIRs to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process, and briefly explain the reasons underlying the lead agency's determination.

4.2.3.1 Use of Temporary At-grade Pumps with External Piping at Venice Pumping Plant and/or Along Hurricane Street

This alternative would include the periodic and temporary use (e.g., Fall through Spring or potentially year round) of rented pumps (three) and associated external piping and back-up diesel generators (three) installed at-grade and on-site within the existing VPP and/or within Hurricane Street (between Canal Court and Esplanade, in lieu of the Proposed Project Site). A new Control

Room would be installed at the VPP. In addition, there is a minimum three-week set up time to bring the equipment on-line. Hurricane Street (between Canal Court and Esplanade) would be closed to the public during this time period. The equipment would operate 24 hours per day. It would also require the demolition of the existing Concrete Masonry Unit (CMU) on top of the newly constructed Venice Manifold (located along Hurricane Street between Canal Court and Esplanade).

Preliminary evaluations indicate that there is little or no available space to house the required pumps and associated piping and back-up generators on-site at the VPP and as such, all equipment would likely need to be installed along Hurricane Street between Canal Court and Esplanade. Since the Venice Manifold Project is currently installed within Hurricane Street any maintenance or repairs to that facility would require removal of the temporary pump equipment and its re-installation. This could result in system operation issues and compromise required redundancies, potentially resulting in catastrophic failure, requiring emergency discharges directly to the Grand Canal and Ballona Lagoon or overflows into the surrounding street network. A preliminary analysis indicates that there is no space available in the existing VPP Control Room to allow for construction of new control facilities. System operation and safety could also potentially be compromised during testing and migration of the control system. This alternative would reduce future risks related to climate change, including increased storm intensities and sea level rise, which have the potential to result in flows that would be beyond the capacity of the existing VPP. It would also provide the required redundancy needed to operate the facility safely and reduce the potential for catastrophic failure. However, as noted below, it would not be able to obtain the required design capacity of 87 million gallons per day (mgd).

Because there is little available space, it is unclear if operational or safety issues would be adequately addressed, including redundancy or sewage bypass capabilities. Similar to the No Build Alternative, this alternative depends on temporary, in lieu of permanent pumping facilities and associated piping and back-up generators in a provisional location and does not solve the long-term needs of the VPP. The use of these pumps and associated equipment in an outdoor environment are also expected to result in more frequent maintenance, breakdowns, and repairs. The anticipated combined pumping capacity of the five existing pumps at the VPP and the three temporary pumps would be between 60 and 65 mgd, which would be below the required design capacity of 87 MGD.

In addition to lack of space to construct the required improvements, the pumps would be required to operate 24-hours per day, seven-days per week, continuously and outdoors along Hurricane Street within a residential neighborhood. Their operation would also likely produce unacceptable noise levels, nuisance odors, and adverse air quality (diesel emissions from the back-up generators), which could affect adjacent sensitive receptors.

The number of near-misses and associated potential for catastrophic failure at the VPP have increased since the 1990s and is expected to worsen, due to climate change and associated sea-level rise and increased storm intensity and frequency. The current VPP does not have standard redundancies in place to address pump failure or required maintenance and therefore, cannot divert flows from the coastal interceptor sewer (CIS) collection area (see Chapter 2, Project Description of this EIR). In the event of catastrophic failure, untreated sewage flows would need to be diverted to the Grand Canal and Ballona Lagoon, both of which are designated as Sensitive Ecological Areas. In addition, the VPP does not contain a modern Control Room, which is needed for flow and pump monitoring.

This alternative could result in potential health and safety risks to area residents and wildlife.

4.2.3.2 Build new Plant on Proposed Site and Decommission and Demolish existing Venice Pumping Plant

This alternative would entail the construction of a new pumping plant on the Proposed Project Site and then decommissioning and demolishing of the existing plant. The new facility would be designed to handle the operational design capacity of the VPP and Proposed VAPP (87 mgd), as described for the Proposed Project (see Chapter 2, Project Description of this EIR) and would meet some, but not all of the project objectives. The lot of the demolished VPP would be converted to an open space area to enhance coastal access.

This alternative would not minimize the potential for sewage spills from the existing VPP because the two available parcels would not be able to physically accommodate the Proposed Project's electrical building and eight pumps (even if submersible pumps were assumed, which have a reduced footprint) required to meet the design capacity of 87 mgd. During extreme wet-weather events, it would not prevent potential impacts on human and environmental health due to the risk of sewage spills from the existing VPP. Moreover, this alternative would not satisfy the objective of providing redundancy to pumping capacity to improve system reliability and allow regular service and maintenance activities to take place without compromising the City's ability to address issues related to the risk of sewage overflows. It would also not address future risks related to climate change, including increased storm intensities and sea-level rise, which have the potential to result in flows that would be beyond the capacity of the existing VPP.

As noted above, there is insufficient space to construct a new plant and associated eight pumps on the two available parcels proposed for the VAPP and therefore, this alternative would not avoid severe operational and safety problems.

A new pumping plant cannot be physically constructed within the two available parcels, despite the installation of submersible pumps. As such, this alternative does not avoid unacceptable adverse social, economic or environmental impacts since it would not solve the VPP's long-term pumping capacity needs. It would also not allow for routine maintenance of pumps, which requires that they be taken off-line for service or in the event of pump failure (including multiple pumps), the ability of the system to have adequate back up or redundancy. Therefore, this alternative would not allow for avoidance of a catastrophic sewage spill into the Grand Canal and Ballona Lagoon, resulting in potential environmental damage and health and safety issues.

This alternative could result in potential health and safety risks to area residents and wildlife.

4.2.3.3 Expand Existing Venice Pumping Plant and Install Pumps and Piping Below-grade

This alternative would entail installation of three permanent pumps and associated piping underground and would require expansion of the existing VPP. Since the Venice Manifold Project is located within Hurricane Street and the Grand Canal and Ballona Lagoon are located to the east and south, respectively, expansion would be limited to the west within Canal Court and the adjacent vacant City-owned parcel at 128 Hurricane Street. Although the exact configuration of the design is not known, it is likely that installation of the three new pumps and associated piping would occur underground within Canal Court (between Hurricane Street and Esplanade). The back-up diesel generators would likely be installed within the adjacent vacant parcel at 128 Hurricane Street. It is not clear where the diversion structure between the VPP and the CIS would be located and

therefore, additional investigation is required. A new Control Room would be installed at the VPP (pending elimination of the existing one), within the adjacent vacant parcel at 128 Hurricane Street, or off-site at the Hyperion Treatment Plant in Playa del Rey.

This alternative would not minimize the potential for sewage spills from the existing VPP, provide redundancy to pumping capacity, and allow regular maintenance activities to occur, and would not address future risk related to climate change, including increased storm intensities and sea-level rise, which have the potential to result in flows that would be beyond the capacity of the existing VPP. This alternative has several inherent challenges and problems (see discussion below).

This alternative has several design and operational challenges that would need to be addressed to ensure that the VPP can be safely operated during construction. In particular, substantial modifications to the existing VPP would be required, necessitating taking it off-line for an extended period and the installation of temporary pumps. Because there is currently no by-pass mechanism for sewage flows from the CIS, this cannot be done since the VPP is required to pump sewage continually to avoid a catastrophic spill event or back-up into the Grand Canal, Ballona Lagoon, or adjacent street network. In addition, the CIS is located on the east side of the VPP and therefore, the existing wet well would have to be expanded to the west to make the connection. This would require extensive modifications to the existing VPP. Moreover, extensive modifications would be required in order to connect to the Venice Manifold (located within Hurricane Street between Canal Court and Esplanade) and to access the existing wet well. It is unclear if this would be structurally feasible. Maintenance of the pumps would also be problematic due to access. It should also be noted that the Venice Manifold has been designed and constructed to accommodate the VAPP from the two available vacant parcels (proposed Project Site) and the future connection to the CIS.

Because no sewage by-pass exists and therefore, the VPP cannot be taken off-line, the implementation of this alternative could result in a catastrophic system failure resulting in sewage spills to the Grand Canal and Ballona Lagoon and adjacent street network. Such an event could endanger the health and safety of area residents and wildlife.

4.2.3.4 Construct VAPP Underground at Proposed Project Site Location with Control Room Located Off-site

This alternative would be identical to the Proposed Project and would entail the construction of permanent pumps and associated piping underground within the Proposed Project Site. The back-up diesel generators would likely be constructed in an enclosed housing and at-grade. However, the new Control Room would be located off-site and possibly at the Hyperion Treatment Plant in Playa del Rey.

This alternative would minimize the potential for sewage spills from the existing VPP, provide redundancy to pumping capacity and allow regular maintenance activities to occur, and would address future risk related to climate change, including increased storm intensities and sea-level rise, which have the potential to result in flows that would be beyond the capacity of the existing VPP.

This alternative would result in increased safety issues since the proposed facility would be un-manned and controlled remotely via a Control Room located at an off-site location, potentially within the Hyperion Treatment Plant. Ideally, the control room should be located on-site since this is a critical City facility. Moreover, this is the only collection and pumping station that is staffed 24 hours per day 365 days per year. There are also hard-wired systems that need to be monitored by staff continuously.

The absence of on-site staff and remote control of the plant increases the potential risk for catastrophic system failure and potential for a sewage spill that could affect the health and safety of adjacent residents and wildlife. The presence of staff on-site increases plant safety through physical monitoring and assessment of the system's capacity and performance.

4.2.3.5 Construct Auxiliary Pumping Plant at Alternate Location along Coastal Interceptor Sewer

This alternative would entail construction of permanent pumps and associated piping and back-up generators at an alternate location along the Coastal Interceptor Sewer. A new Control Room would be installed on-site at this location. In addition, a new force main would be required.

This alternative would not minimize the potential for sewage spills from the existing VPP, provide redundancy to pumping capacity, and allow regular maintenance activities to occur, and would not address future risk related to climate change, including increased storm intensities and sea-level rise, which have the potential to result in flows that would be beyond the capacity of the existing VPP.

The VPP is located at a "low-point" in the CIS conveyance system and must pump sewage underneath and across the Marina del Rey channel and then to the Hyperion Treatment Plant (located Playa del Rey), which entails an elevational difference of some 60 feet. Relocating the auxiliary pumps and diversion structure outside of this area would not provide the necessary hydraulic capacity and redundancy needed during wet-weather or extreme weather events and therefore, could result in a catastrophic spill events or back-up into the Grand Canal, Ballona Lagoon, or street network. This alternative could result in potential health and safety risks to area residents and wildlife.

4.2.3.6 Summary

On December 1, 2015 and on June 11, 2016, the City of Los Angeles, Bureau of Engineering and its design team conducted Project Development Team (PDT) meetings to develop, evaluate, and screen project alternatives. This was undertaken in order to comply with CEQA and develop a reasonable range of alternatives for consideration in the Draft Environmental Impact Report (Draft EIR). The process was completed in two stages: (1) consultant development of potential alternatives for analysis and discussion; and (2) evaluation of feasible and infeasible alternatives. This information was then used by the PDT to refine the alternatives into what is now the Proposed Project that is described in Chapter 2 and evaluated in Chapter 3 of this EIR.

4.3 Evaluation of CEQA Alternatives

The impacts of each of the alternatives are briefly described below and are compared to the impacts of the Proposed Project. The analysis includes a discussion of a No Project/No Build Alternative as required under Section 15126(e)(1) of the State CEQA Guidelines so that decision-makers can compare the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project. Other than the No Project/No Build Alternative, each of these alternatives would meet most of the Proposed Project objectives described in Chapter 2, but only the Proposed Project meets them all. In addition, any alternatives that would result in less-than-significant impacts with mitigation that are similar to the Proposed Project, would be required to comply with the same mitigation measures as would be implemented for the Proposed Project.

4.3.1 No Project/No Build Alternative

Since the Proposed Project would not be implemented, short-term unavoidable significant impacts related to construction noise and vibration and land use and planning (related to construction noise and vibration) or potentially significant cumulative impacts associated with energy would not result. In addition, there are currently no diversions for bypassing the VPP and the pumping plant must continuously pump sewage flows from the CIS in order to avoid sewage backups. As such, this alternative would not provide the required redundancy needed to operate the VPP safely and reduce the potential for catastrophic failure. It would also not reduce future risks related to climate change, including increased storm intensities and sea level rise, which have the potential to result in flows that would be beyond the capacity of the existing facility and could result in potentially significant impacts related to health and safety and wildlife (due to a catastrophic sewage spill in the adjacent street system and Grand Canal and Ballona Lagoon). Because this alternative would require the periodic rental and placement of pumps along Hurricane Street (between Canal Court and Esplanade), required to operate 24-hours per day, seven-days per week, these activities would produce unacceptable noise levels and nuisance odors and air quality (diesel emissions from the back-up generators) on adjacent sensitive receptors. None of the Proposed Project's objectives would be met by this alternative.

4.3.2 Alternative 1 – Construct Venice Auxiliary Pumping Plant and Permanently Vacate Hurricane Street between Canal Court and Esplanade

4.3.2.1 Aesthetics

Impacts would be similar to the Proposed Project.

4.3.2.2 Air Quality

Impacts would be similar to the Proposed Project.

4.3.2.3 Biological Resources

Impacts would be similar to the Proposed Project.

4.3.2.4 Cultural Resources

Impacts would be similar to the Proposed Project.

4.3.2.5 Geology and Soils

Impacts would be similar to the Proposed Project.

4.3.2.6 Greenhouse Gas Emissions

Impacts would be similar to the Proposed Project.

4.3.2.7 Hydrology and Water Quality

Impacts would be similar to the Proposed Project.

4.3.2.8 Land Use

Impacts would be similar to the Proposed Project, although a street vacation permit would be required and Hurricane Street between Canal Court and Esplanade would be permanently closed to the public and parking eliminated. The street vacation would not be consistent with California Coastal Commission policies regarding coastal access and parking. To address the elimination of existing street parking along Hurricane Street in this area, a total of eight parking spaces would be provided at 128 Hurricane Street, immediately west of the VPP. Although pedestrian access along Hurricane Street between Canal Court and Esplanade would be eliminated, additional alternate access would be available via Canal Court and Galleon Street. Therefore, impacts would be less than significant and no mitigation measures are required.

4.3.2.9 Noise & Vibration

Impacts would be similar to the Proposed Project.

4.3.2.10 Transportation/Traffic

Impacts would be similar to the Proposed Project. Hurricane Street extending from Canal Court to Esplanade would be permanently closed to the public and parking eliminated. To address the elimination of existing street parking along Hurricane Street in this area, a total of eight parking spaces would be provided at 128 Hurricane Street, immediately west of the VPP. Although pedestrian access along Hurricane Street between Canal Court and Esplanade would be eliminated, additional alternate access would be available via Canal Court and Galleon Street. Therefore, impacts would be less than significant and no mitigation measures are required related to access. In addition, as with the Proposed Project, with the implementation of mitigation measures, direct and indirect impacts associated with transportation/traffic conditions during construction and operation of the Proposed Project would be less than significant.

4.3.2.11 Energy

Impacts would be similar to the Proposed Project.

4.3.2.12 Project Objectives Met

Under this alternative, all project objectives would be met, similar to the Proposed Project. Impacts during both construction and operation would be similar to the Proposed Project with the exception of pedestrian and vehicular access. Under this alternative, Hurricane Street between Canal Court and Esplanade would be vacated (closed) and public access permanently eliminated. This project component would reduce available area parking to residents and beach-goers along Hurricane Street between Canal Court and Esplanade. However, alternate parking (totaling 8 spaces) would be made available at 128 Hurricane Street (vacant parcel immediately west of the VPP). In addition, as noted in Section 3.10, Transportation and Traffic of this EIR (see also Appendix J [Parking Memorandum] of this EIR), the elimination of these parking spaces would result in less than significant impacts and no mitigation is required. Moreover, alternate pedestrian access to Esplanade (see Figure 2-2, Chapter 2 [Project Description] of this EIR) would be available via Canal

Court and Galleon Street, although this would be slightly more circuitous for some residents/visitors. Because alternate access would be available to the Grand Canal and Ballona Lagoon, impacts would be less than significant related to coastal access.

4.4 Comparison of CEQA Alternatives

Table 4-1 provides a comparison of the Proposed Project, No Project/No Build Alternative and Alternative 1. As noted below, the Proposed Project and Alternative 1 have similar impacts with the majority being less than significant or less than significant impacts with mitigation. In both cases for noise and vibration, impacts would be Significant and Unavoidable (construction only) as would land use and planning (construction only and related to noise and vibration), while cumulative energy impacts are potentially significant. In the case of the No Project/No Build Alternative, while impacts would be less than significant for the majority of environmental topics, they would be potentially significant and adverse for both Biological Resources and Hydrology and Water Quality since the existing VPP has been subject to near catastrophic failure due to insufficient pumping capacity during extreme wet-weather events in which multiple pumps have failed, were being repaired, or undergoing maintenance.

Table 4-1. Comparison of Proposed Project and Alternatives

Environmental Resource	Alternatives		
	Proposed Project	No Project/No Build Alternative	Alternative 1- Construct Venice Auxiliary Pumping Plant and Permanently Vacate Hurricane Street between Canal Court and Esplanade
Aesthetics	Less than Significant Impact with Mitigation	Environmentally Superior	Less than Significant Impact with Mitigation
Air Quality	Less than Significant Impact with Mitigation	Environmentally Superior	Less than Significant Impact with Mitigation
Biological Resources	Less than Significant Impact with Mitigation	Potentially Significant and Adverse	Less than Significant Impact with Mitigation
Cultural Resources	Less than Significant Impact with Mitigation	Environmentally Superior	Less than Significant Impact with Mitigation
Geology and Soils	Less than Significant Impact with Mitigation	Environmentally Superior	Less than Significant Impact with Mitigation

Environmental Resource	Alternatives		
	Proposed Project	No Project/No Build Alternative	Alternative 1- Construct Venice Auxiliary Pumping Plant and Permanently Vacate Hurricane Street between Canal Court and Esplanade
Greenhouse Gas Emissions			
	Less than Significant	Environmentally Superior	Less than Significant
Hydrology and Water Quality			
	Significant and Unavoidable (operation only and related to tsunami and sea level rise)	Potentially Significant and Adverse	Significant and Unavoidable (operation only and related to tsunami and sea level rise)
Land Use and Planning			
	Significant and Unavoidable (construction only and related to noise and vibration)	Environmentally Superior	Significant and Unavoidable (construction only and related to noise and vibration)
Noise and Vibration			
	Significant and Unavoidable (construction only)	Environmentally Superior	Significant and Unavoidable (construction only)
Transportation and Traffic			
	Less than Significant Impact with Mitigation	Environmentally Superior	Less than Significant Impact with Mitigation
Energy			
	No Impact	Environmentally Superior	No Impact
Source: ICF, 2016.			

4.5 Environmentally Superior Alternative

In addition to the discussion and comparison of impacts of a proposed project and its alternatives, Section 15126.6 of the State CEQA Guidelines requires that an “environmentally superior” alternative be identified and the reasons for such a selection be disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the least amount of adverse impacts. In this case, as detailed above and shown in Table 4-1, the No Project/No Build Alternative would result in the fewest impacts on the existing environment. It should be noted however, that the No Project/No Build Alternative could result in catastrophic failure since the VPP has experienced near-miss conditions that would have resulted in discharges of sewage to the Grand Canal, Ballona Lagoon, or adjacent street system (see Chapter 2, Project Description of this EIR for more detail).

Pursuant to CEQA regulations (see CEQA Guidelines Section 15126.6(e)(2)), when the No Project Alternative is identified as the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives. To determine which of the other alternatives would be environmentally superior, the analysis focused on those Proposed Project impacts identified as significant and unavoidable. As noted in Table 4-1, impacts associated with the Proposed Project and Alternative 1 would be similar. The differences between these two are minor since both alternatives would eliminate parking along Hurricane Street between Canal Court and Esplanade and provide alternate parking at 128 Hurricane Street. In the case of the Proposed Project, although Hurricane Street would not be vacated, red striping of the curb would occur, thereby eliminating these spaces permanently from public use. Similarly, under Alternative 1, the vacation of Hurricane Street would also permanently remove these spaces. In the case of pedestrian access, the Proposed Project would maintain access along Hurricane Street between Canal Court and Esplanade, while Alternative 1 would permanently eliminate it. Although alternate access to the Esplanade would be available via Canal Court and Galleon Street, access would be more circuitous to residents/visitors. As such, the Proposed Project is considered the Environmentally Superior Alternative.

