
III. CORRECTIONS AND ADDITIONS TO THE DRAFT EIR

C. ENVIRONMENTAL ANALYSIS

INTRODUCTION

The changes to the proposed development project described in Section III.A (Changes to the Project Description) and DEIR text changes described in Section III.B (Revisions to the Draft EIR) are evaluated below to determine whether they would result in a new significant impact or increase the severity of previously disclosed impacts of the project. Staff has determined that the changes would not result in additional significant environmental impacts not addressed in the Draft EIR or increase the severity of previously identified environmental impacts. Therefore, no new mitigation measures are required. Minor changes resulting in little to no environmental impact are not included in this section as environmental impacts from these minor changes are negligible.

AESTHETICS

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and may extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). The visual signs of construction (e.g., construction fencing, vehicles, flag men) will be present, in reduced volumes, for up to 20 years. However, as one building would be finished and the construction site cleared before the next building is initiated, there would be greater visual signs of progress and order to the site compared to disturbance of the entire site over a shorter period of time. Impacts continue to be less than significant.

Revised Wellness Center Site Plan: The new site plan reduces the Wellness Center building square footage from 98,785 to 70,348 square feet and the total building footprint by 4%. The public storage building, which was proposed to be housed in a separate two-story building at the northern end of the AO Zone along Airport Street, has been reduced from 20,000 square feet to 10,000 square feet and relocated within a Wellness Center building on the southern end of the site, adjacent to warehouse existing buildings. The wetlands trail on this site has been eliminated. The elimination of structures in the archaeological site area, the elimination of the separate two-story storage building, and improved clustering of the Wellness Center with adjoining development to the south result in reduced visual impacts from Airport Street (Views 1 and 2 of the DEIR) and from the Mavericks Parking Lot (View 3). Project impacts to aesthetic resources, as mitigated, remain less than significant.

2-Foot Increase in the Wellness Center First Floor Elevations: First floor elevations of Wellness Center Buildings have been raised from 18 feet to 20 feet National Geodetic Vertical Datum (NGVD), which is above the estimated maximum elevations when accounting for a 100-year flood event, sea level rise and the peak tsunami inundation. This change has been accompanied by a reduction in the vertical size of the buildings, so that their height above natural grade remain the same as described by the DEIR. Project impacts to aesthetic resources, as mitigated, remain less than significant.

Impacts of Landscape Buffers and Drip Irrigation: Increased planting of wetlands trees and shrubs in accordance with the Planting Plans in the 90% Design Wetlands Restoration Report will provide additional visual screening of the project. Project impacts to aesthetic resources, as mitigated, remain less than significant.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The area of the permeable trail would be increased from 14,000 square feet to 17,000 square feet due to an increase in its width from eight to ten feet. The trail would allow for multiple-purpose uses, including pedestrians and bicycles, and would continue to resemble a sidewalk. Project impacts to aesthetic resources, as mitigated, remain less than significant.

Anti-Glare, Anti-Reflective Surface to be Used on Solar Panels: An anti-glare, anti-reflective surface would be used on all solar panels in order to minimize glare and reflection from the panels. This change in the project description would not reduce the efficiency of the solar panels and would minimize project-related glare and reflectivity. Project impacts to aesthetic resources, as mitigated, remain less than significant.

Replace Single Membrane Bioreactor (MBR) System with Multiple MBR System: The three smaller MBR plants, which will be buried, will allow for phased construction and will be less visible than the large single MBR plant. Total building square footages will remain the same. Project impacts to aesthetic resources, as mitigated, remain less than significant.

AGRICULTURE RESOURCES

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Under these scenarios, only a portion of the site would be developed at a time, allowing the remaining portions to remain under cultivation. Therefore, project impacts to agricultural resources, which are less than significant, are likely to be further reduced under scenarios contemplating longer construction periods.

AIR QUALITY

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Exhaust emissions (i.e., fugitive dust) from engine-powered equipment would be reduced under these scenarios. Mitigation Measure AQ-2 of the DEIR requires implementation of a dust control program that would further reduce this impact. Therefore, project impacts to air quality, which are less than significant with mitigation, are likely to be further reduced.

Elimination of Wellness Center "Community Center": The fitness center will not be available to the surrounding community but only for Wellness Center residents, guests and staff and employees of the Office Park. Limiting use of the fitness center reduces the number of traffic trips estimated for the Wellness Center by 215 trips, from 384 to 169 trips. Therefore, total project trips have been so reduced

from 2,123 trips to 1,908 trips. The reduction in trips are local and do not impact the intersections at Highways 1 and 92. Reduced traffic impacts will result in corresponding reduced air quality impacts from vehicle emissions. Therefore, project impacts to air quality, which are less than significant with mitigation, are likely to be further reduced.

Elimination of Natural Gas for Heating and Building Operations Due to Solar Power: Natural gas would be used for backup purposes only. Therefore, area source emissions associated with regular natural gas usage in the residences and offices would be reduced from levels described in the DEIR. Therefore, project impacts to air quality, which are less than significant with mitigation, are likely to be further reduced.

Replace Single MBR System with Multiple MBR System: As stated in Section II.B, the DEIR described MBR plants as containing internal combustion equipment that would impact air quality. However, the plants do not, as proposed, contain internal combustion equipment and therefore would not result in significant air quality impacts. Therefore, project impacts to air quality, which are less than significant with mitigation, are likely to be further reduced.

BIOLOGICAL RESOURCES

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Only a portion of the site would be developed at a time, allowing the remaining portions to remain in an undeveloped state, thereby reducing impacts to wildlife foraging and movement. Also, wetlands restoration would not be completed all at once but would be phased, allowing for a more gradual transition. Instead of a shorter exposure to louder noise levels from construction, these scenarios would involve exposure to lower noise levels occurring at four separate points within the potential 20-year timeframe. Mitigation measures requiring exclusion fencing and surveys would still be implemented. Therefore, project impacts to biological resources, which are less than significant with mitigation, are likely to be further reduced.

Revised Wellness Center Site Plan: The new site plan reduces the Wellness Center building square footage from 98,785 to 70,348 square feet and the total building footprint by 4%. The fire trail would be removed from the wetlands buffer, further reducing the impacts to habitat. Therefore, project impacts to biological resources, which are less than significant with mitigation, are likely to be further reduced.

Replacement of Septic Drainfields with Title 22-Treated Wastewater Disposal to Granada Sanitary District (GSD) System and Replacement of Rain Gardens with Infiltration to Pervious Surface Parking Lots: Impacts discussed in the DEIR related to treated wastewater disposal through drainfields and stormwater drainage to wetlands via rain gardens, including potential groundwater and surface water contamination, have been further reduced. Instead of flowing to rain gardens located within the restored wetland areas, rainwater from surface and roof gutters will be infiltrated in the pervious surface parking lot. There will be no sub-surface disposal of treated wastewater, with the exception of minimal runoff of treated wastewater used for surface and solar panel washing, as allowed by CDPH and RWQCB. All excess treated recycled water not used by toilet flushing, irrigation, and washing uses will be directed to

the GSD system, using sewer capacity (8 EDUs) which has already been assessed to the property by GSD. A condition of approval of the project would require the applicant to secure such a connection from the GSD. Therefore, project impacts to biological resources, which are less than significant with mitigation, are likely to be further reduced.

Impacts of Landscape Buffers and Drip Irrigation: Additional wetland habitat will replace non-habitat landscaping described in the DEIR. Provision of additional habitat will extend wildlife foraging areas on-site and provide for additional plant species diversity in non-wetland areas of the sites. Therefore, project impacts to biological resources, which are less than significant with mitigation, are likely to be further reduced.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The area of the permeable trail would be increased from 14,000 square feet to 17,000 square feet. The trail would allow for multiple purpose uses including pedestrians and bicycles and would continue to resemble a sidewalk. The widening of the sidewalk would only minimally add to the project footprint. Project impacts to biological resources, as mitigated, remain less than significant.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: To comply with Mitigation Measures GEO-1 through 8, the applicant provides the following additional information: 1) the project will utilize a drilled-pier supported foundation of interlocking grade beams; 2) the Final Geotechnical Report will include Cone Penetration Tests (CPTs) specifically located at the final foundation locations to determine the size, length and number of the piers required to support the buildings, limiting settlement to values allowed by the building code; 3) all utilities shall be constructed of materials that will withstand site settlement without rupture, as described in the DEIR; 4) all connections of utilities to the buildings will be with flexible connections designed to accommodate the differential settlement described in the DEIR; 5) all expansive surface soils will be removed under the permeable concrete pavement parking lot and replaced with permeable soils or gravel in accordance with Mitigation Measure GEO-7; 6) the thickness of the gravel layer under the Office Park parking lot will be approximately 12 inches, and 7) the drilled pier foundation system and permeable soil/gravel base for the parking lot will be located within the existing building footprints and areas of disturbance. There is no additional information regarding these below-ground systems that identifies anything that would result in additional biological impacts from those discussed in the DEIR. Project impacts to biological resources, as mitigated, remain less than significant. Topical Response 10, Final Geotechnical Report, of the FEIR includes further discussion of the potential impacts of geological mitigation measures.

CULTURAL RESOURCES

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios. The project, as revised, would avoid the cultural site. Mitigation measures to reduce impacts to human remains and paleontological resources would also be implemented under the extended construction timeframe scenarios. Project impacts to cultural resources, as mitigated, remain less than significant.

Revised Wellness Center Site Plan: The purpose of the redesign is to comply with Mitigation Measures CULT-2; therefore, impacts to cultural resources remain less than significant.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: The drilled pier foundation system and permeable soil/gravel base for the parking lot will be located within the existing building footprints and areas of disturbance. However, additional below-ground disturbance has the potential to uncover cultural resources. This potential impact is mitigated by existing cultural mitigation measures. Project impacts to cultural resources, as mitigated, remain less than significant.

GEOLOGY AND SOILS

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Only a portion of the site would be developed at a time, allowing the remaining portions to remain in an undeveloped state, thereby reducing potential impacts related to soil erosion and construction of impervious surface (including pervious parking lot). The levels of potential impact related to geological hazards remain the same under the extended construction scenarios.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: To comply with Mitigation Measures GEO-1 through 8, the project will utilize a drilled-pier supported foundation of interlocking grade beams. The Final Geotechnical Report will include CPTs specifically located at the final foundation locations to determine the size, length and number of the piers required to support the buildings, limiting settlement to code allowed values. All utilities shall be constructed of materials that will withstand the site settlement as described in the DEIR without rupture. All connections of utilities to the buildings will be with flexible connections designed to accommodate the differential settlement described in the DEIR. Expansive and impermeable surface soils will be removed under the permeable concrete pavement and replaced with permeable soils or gravel in accordance with Mitigation Measure GEO-7. The thickness of the gravel layer under the Office Park parking lot will be approximately 12 inches. All permeable pavements will be constructed with concrete pavers with adequate gravel separation to insure infiltration. All drainage will be diverted away from the structures. Subdrains will be installed to divert water away from the structures. The purpose of providing this additional information is to comply with Mitigation Measures GEO-1 through 8; therefore, project impacts to geology and soils remain less than significant, as mitigated.

HAZARDS AND HAZARDOUS MATERIALS

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). While use of hazardous materials during construction would be reduced with lower levels of use occurring at separate points over a period up to 20 years, there would be more instances of use over a period up to 20 years. Therefore, risks related to the transport, use, disposal, and accidental release of hazardous materials during construction would be similar to the

proposed project. Construction traffic would be reduced under this scenario and spread out over an extended period of time lasting up to 20 years, thereby reducing impacts related to interference with an emergency response plan or evacuation plan. The levels of potential impact related to airport and wildfire hazards remain the same under these scenarios.

Elimination of Natural Gas for Heating and Building Operations Due to Solar Power: Natural gas would be used for backup purposes only. Less than significant levels of impacts, as discussed in the DEIR, would be further reduced.

Replace Single MBR System with Multiple MBR System: The water treatment systems will be designed with the same design criteria described in the DEIR but a separate system is provided for each individual owner in the Office Park and operated under contract by the Wellness Center. While the same amount of bleach or acids for cleaning the MBR system would be required, transport of such materials within the site may increase. However, as discussed in the DEIR, any upset (spill) would be limited in the area of impact and could be remediated following standard spill response procedures. Furthermore, full compliance with OSHA mandatory compliance safety plans, as well as other applicable federal, state, and local laws, regulations and programs related to the routine transport, use, and disposal of hazardous materials in the workplace would ensure that impacts resulting from the routine transport, use, and disposal of hazardous materials associated with the operation of the proposed project would not result in a significant hazard to human health and/or the environment. Therefore, hazardous material impacts associated with operation of the smaller, separate MBR plants on-site would be less than significant and no mitigation measures are required.

Improved Mitigation Measure HAZ-3 (Hazards Associated with Airport Operations): Mitigation Measure HAZ-3 requires, prior to approval of final development plans, an avigation easement to be granted by the property owner for the project site, in a form satisfactory to the County Director of Public Works. The mitigation measure requires the avigation easement to be recorded and shown on the vesting tentative map. Without implementation of Mitigation Measure HAZ-3, Impact HAZ-3 on page IV.G-25 states that the project would result in a less than significant impact associated with airport safety hazards to people residing or working in the area of a public airport. The mitigation measure does not reduce potential hazard impact, but is a disclosure tool that ensues the ongoing viability of airport operations, notwithstanding the proposed residential uses, in that, through the recordation of the easement, the property owner grants a right to subject the property to noise, vibration, fumes, dust, and fuel particle emissions associated with normal airport activity. Text additions improve the effect of this disclosure tool by acknowledging the value of the Half Moon Bay Airport to the residents of this County and require the Wellness Center resident(s) unable or unwilling to tolerate airport noise as permitted by the avigation easement to be relocated rather than to impose changes on airport operations.

HYDROLOGY AND WATER QUALITY

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Only a portion of the site would be developed at a time, allowing the remaining portions to remain in an undeveloped state, thereby reducing potential impacts

related to drainage and runoff. The levels of potential impact related to waste discharge, groundwater, and flooding remain the same under these scenarios.

Revised Wellness Center Site Plan: The new site plan reduces the total Wellness Center building square footage from 98,785 to 94,762 square feet. However, overall footprint will remain generally the same. The fire trail will be removed from the wetlands buffer further reducing the impacts to habitat. Therefore, project impacts to hydrology and water quality, which are less than significant with mitigation, are likely to be further reduced.

Changes to Grading Estimates for the Wellness Center: Grading estimates have changed due to the proposed under-building water storage tank for fire supply and the increase in the Wellness Center building pads by 2 feet to accommodate first floor elevations of 20 feet (formerly 18-feet). As shown in New Table III-9 of Section II of the FEIR, overall grading and gravel importation has decreased due the reduction in the size of the Wellness Center and a slight reduction in the total size of the pervious pavement on the Office Park site (per Environmental Health Division well setback requirements). Therefore, the impacts of grading to water quality, which are less than significant with mitigation, are likely to be further reduced.

Replacement of Septic Drainfields with Title 22 Treated Wastewater Disposal to Granada Sanitary District (GSD) System and Replacement of Rain Gardens with Infiltration to Pervious Surface Parking Lots: Impacts discussed in the DEIR related to treated wastewater disposal in drainfields and surface runoff drainage to wetlands via rain gardens, including potential groundwater and surface water contamination, have been further reduced.

Instead of flowing to rain gardens located within the restored wetland areas, rainwater from surfaces and roof gutters will be infiltrated in the pervious surface parking lot. On page IV.H-55, Table IV.H-7, the hydrology analyses of the DEIR concluded that the project would result in an 80% increase in storm water discharge from existing site conditions. This conclusion is based on analysis contained in the Technical Memorandum #1 provided in Appendix H of the DEIR. The 80% increase in surface flow is attributed to the creation of impervious area from building construction on the project sites and direction of roof runoff to rain gardens in the wetlands. Table 4 shows that the Wellness Center proposal would result in an increase in impervious developed area of 1.2 acres (the roof area of the proposed buildings per Table IV.H-5 of the DEIR). Table 4 shows that the Office Park proposal would result in an increase in impervious developed area of 1.8 acres (the roof area of the office buildings per Table IV.H-4 of the DEIR). Therefore, the increase in imperviousness, and hence the 80% increase in runoff described in the DEIR, is based solely on building roof runoff.

Project drainage is revised to direct all of the roof runoff through a perforated 6-inch pipe to an infiltration system located in trenches below the parking lot infiltration system sized for a 10-year storm. Likewise, all surface water in the parking lot would be absorbed into the permeable pavers and infiltrate into the same system. The project as described in the FEIR proposes to infiltrate all storm drainage. Based on the proposed method of infiltrating surface water runoff from rooftops and parking areas, the project will not increase storm runoff and surface flows from existing conditions.

There will be no sub-surface disposal of wastewater, with the exception of minimal runoff of treated wastewater used for surface and solar panel washing, as allowed by CDPH and RWQCB. All excess treated recycled water not used by toilet flushing, irrigation, and washing uses will be directed to the GSD system, using already sewer capacity (8 EDUs) which has already been assessed to the property by GSD. Based on the foregoing, project impacts to hydrology and water quality, which are less than significant with mitigation, are likely to be further reduced.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The area of the permeable trail would be increased from 14,000 square feet to 17,000 square feet. The trail would allow for multiple-purpose uses, including pedestrians and bicycles, and would continue to resemble a sidewalk. The widening of the sidewalk would only minimally add to the project footprint. Project impacts to hydrology and water quality, as mitigated, remain less than significant.

Revisions to First Floor Elevations of Wellness Center Buildings and Water Recycling Systems: Additional project details, as described below, have been provided to comply with Mitigation Measure HYDRO-9:

1. First floor elevations were raised from 18 feet to 20 feet NGVD.¹
2. Wellness Center structures, as necessary, will be surrounded by a 4-foot tall foundation wall designed to resist and direct flow away from the buildings.
3. A vegetative buffer of wetlands trees will be installed around the perimeter of the property and will be designed to resist hydraulic flow and resist the transport of debris that may impact the Big Wave property.
4. For the protection of water and wastewater facilities, the project has incorporated the following features:
 - a. All water recycling systems will be buried and capable of continuous operation in a submerged state. The minimum elevation of the water recycling system manholes will be 18 feet (3.5 feet above the maximum recorded tsunami inundation). All pumps will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.
 - b. The well is located at an elevation of 26 feet (11.5 feet above the maximum tsunami elevation). The well utilizes a submersible pump capable of continuous operation in a

¹ Project elevations are based on a Base Flood Elevation (BFE) of 8.5 feet NGVD (refer to pages IV.H-17 and 18 and Figure IV.H-6 of the DEIR), a maximum recorded wave run-up elevation of 14.35 feet NGVD in 273 years, and a highest projected sea level rise over the next century of 5 feet from the current mean high tide. (Currently, mean high tide is at 3.49 feet NGVD.) Project elevations are over 5 feet above the highest of these levels (tsunami at 14.35 feet NGVD).

submerged state. The well pump will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.

- c. As additional backup, project contains 2 days of water and wastewater storage that will prevent a lack of supply or wastewater spillage from occurring until after the tsunami event has subsided.

While compliance is required to reduce risk from tsunami and seiche, implementation of the above project details would also reduce impacts from flooding and sea level rise as described in the DEIR. Therefore, project impacts to hydrology and water quality remain less than significant, as mitigated.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: The project would comply with Mitigation Measure GEO-7 by removing impermeable soils below the pavement when practical and replacing them with gravel. All permeable pavements will be supported by gravel and will be constructed with concrete pavers with adequate gravel separation to insure infiltration. All drainage will be diverted away from the structures. Subdrains will be installed to divert water away from the structures. Impacts related to drainage, as discussed in the DEIR, would remain at less than significant with mitigation.

LAND USE AND PLANNING

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). The project would be required to comply with policies and regulations pertaining to construction operations for the full length of project construction. The project impacts to land use and planning would remain at less than significant as discussed in the DEIR.

New Recommended Mitigation Measure LU-2 (CDP Required from California Coastal Commission): A Coastal Development Permit from the California Coastal Commission (CCC) is required for development activities that extend within tidelands, submerged lands, or on public trust lands, whether filled or unfilled, lying within the Coastal Zone. As described in the revision to page IV.I-12 of the DEIR under Section III.B of the FEIR, the project must comply with Coastal Act policies and permitting requirements for any portion of the project that may extend within the CCC's original jurisdiction. The DEIR states that the project is consistent with the Local Coastal Program (see revisions under page IV.I-36 of the DEIR, in Section III.B of the FEIR), which has been certified by the CCC as being consistent with, and adequate to carry out the requirements of the Coastal Act. The proposed project would be required to comply with applicable regulations of the LCP and the Coastal Act regardless of whether the requirement is stated in a mitigation measure. Therefore, impacts would be less than significant.

NOISE

3/7.4/20-Year Construction Scenarios (Construction Noise): As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Use of heavy equipment, smaller power tools, generators, and other noise sources would be reduced due to non-concurrent building construction, and thereby noise levels would be reduced. This scenario would involve exposure to lower noise levels occurring at four separate points in a period extending up to 20 years. Mitigation Measure NOISE-1 of the DEIR requires the developer to implement noise reduction measures that would further reduce this impact, which would remain at less than significant, as mitigated.

3/7.4/20-Year Construction Scenarios (Construction-Related Ground-Borne Vibration): As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Grading, excavation, and building construction activities, which generate low levels of ground-borne vibration, would be scaled down, and thereby vibration levels would be reduced. Instead of greater levels of vibration, these scenarios would involve exposures to lower levels of vibration occurring at four separate points in a period extending up to 20 years. In compliance with Mitigation Measure NOISE-1, the applicant proposes to use drilled piers instead of impact pile drivers, which would further reduce this impact. Project noise impact would remain at less than significant, with mitigation.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: To comply with Mitigation Measures GEO-1 through 8, the project will incorporate a foundation of drilled pier supported interlocking grade beams. As the applicant will utilize drilled piers instead of impact pile drivers, this design specification complies with Mitigation Measure NOISE-1. Project noise impact would remain at less than significant, with mitigation.

Improved Mitigation Measure HAZ-3 (Hazards Associated with Airport Operations): As discussed in the DEIR, operational noise levels at the project site, including airport and roadway noise levels, are less than significant. The modification of Mitigation Measure HAZ-3 to require, prior to approval of final development plans, an aviation easement to be established for the project site, does not affect project noise levels and noise impacts from aircraft would remain less than significant.

POPULATION AND HOUSING

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Under both 7.4-year and 20-year scenarios, construction of buildings would be non-concurrent and would require a reduced labor force to be employed at any one time. Therefore, construction employment at any one time would be reduced. This would result in a reduced impact related to induction of population growth, which is less than significant as discussed in the DEIR.

Improved Mitigation Measure HAZ-3 (Hazards Associated with Airport Operations): Mitigation Measure HAZ-3 requires, prior to approval of final development plans, an aviation easement to be established for the project site, in a form satisfactory to the County Director of Public Works. The mitigation measure requires the aviation easement to be recorded and shown on the vesting tentative map. Text additions improve the disclosure tool by acknowledging the importance of the Half Moon Bay Airport to the residents of this County and require the Wellness Center resident(s) unable or unwilling to tolerate airport noise as permitted by the aviation easement to be relocated rather than to impose changes on airport operations. The applicant has informed the County that it expects very few, if any, residents will need to relocate due to aircraft noise and the potential relocation of an anticipated small number of disabled residents due to discomfort caused by noise would not reduce or increase the potential of population growth in the area or significantly impact housing supply. Overall, the Wellness Center would continue to fulfill an existing need for special needs housing in the area, which is currently limited.

PUBLIC SERVICES

Police

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Construction fencing would continue to mitigate the potential impact (i.e., nuisances, hazards, theft and vandalism) to police protection services from construction sites to a less than significant level.

Fire Protection

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Implementation of “good housekeeping” procedures by the construction contractors would continue to mitigate potential fire hazards during construction. Based on the close proximity of the nearest police station and practices of navigating through traffic (i.e., use of sirens), impacts to police service would continue to be less than significant with mitigation.

On-site Pool or Fire Tank as Fire Supply: The proposed system would meet the requirements of the Coastside County Fire Protection District (District), including pressure and flow, and would not strain existing municipal water supplies. Therefore, the proposed on-site options for water storage, as approved by the District, would not impact fire services to the site.

Schools

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction

scenarios as construction is a temporary activity with temporary impacts. The project impacts to schools would remain at less than significant as discussed in the DEIR.

Parks and Recreation

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios as construction is a temporary activity with temporary impacts. The project impacts to parks and recreation would remain at less than significant as discussed in the DEIR.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The widening of the trail would allow for multiple-purpose uses including pedestrians and bicycles and would continue to resemble a sidewalk. The trail would continue to provide a sidewalk where one does not currently exist and a linkage to existing park and recreation opportunities in the area. The project impacts to parks and recreation would remain at less than significant as discussed in the DEIR.

Libraries

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios as construction is a temporary activity with temporary impacts. The project impacts to libraries would remain at less than significant as discussed in the DEIR.

TRANSPORTATION/TRAFFIC

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). The amount of construction traffic would be reduced under these scenarios and spread out over a period extending up to 20 years. County and emergency services would be notified of any planned road closures or restrictions on any roadways, alternative emergency routes, and detours due to construction activities on the project site. While impacts related to construction traffic would continue to be less than significant, implementation of recommended Mitigation Measure TRANS-8 of the DEIR, which recommends a traffic control plan and requires on-site staging, would further reduce any impact.

Revised Wellness Center Site Plan, Including Elimination of Wellness Center “Community Center” and Reduction in Parking Spaces from 73 to 50 Spaces: The new site plan reduces the Wellness Center footprint, square footage, and reduces the traffic trips per day by eliminating the community recreational space. The fitness center will not be available to the general public, but only to Wellness Center residents, guests, and staff and Office Park employees. Limiting the use of the Wellness Center reduces the amount of traffic trips estimated for the Wellness Center by 215 trips, from 384 to 169 trips.

Therefore, total project trips have been so reduced from 2,123 trips to 1,908 trips. The reduction in trips is local and does not impact the intersections at Highway 1 and 92. Project traffic impact levels, less than significant with mitigation as discussed in the DEIR, would be further reduced. Regarding the reduction in 23 parking spaces, as shown in Table IV.M-10 of the DEIR, 33 of the Wellness Center parking spaces were allocated to the Community Center. The Community Center, which was open to the Coastsides public, has been eliminated and the fitness center would only be available to Wellness Center residents, staff, guests and Office Park employees. Other than Wellness Center guests, all fitness center users would work or live on-site. The applicant proposes to retain 10 of the spaces allocated for the Community Center. Parking spaces allocated to other uses remain the same. Therefore, project would not result in inadequate parking capacity and impacts would continue to be less than significant and no mitigation measures are required.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The widening of the trail would allow for multiple-purpose uses including pedestrians and bicycles and would continue to resemble a sidewalk. The trail would continue to provide a sidewalk where one does not currently exist and a linkage to existing park and recreation opportunities in the area. The project impacts to transportation and traffic in the area would remain at less than significant with mitigation as discussed in the DEIR.

Office Park Shuttle to Accommodate a Minimum of 50 Cars and Their Drivers: Prior to occupancy of any Office Park building, the applicant will implement Traffic Demand Management (TDM) measures, including an off-site parking agreement and shuttle services to the Office Park (to accommodate a minimum of 50 cars and their drivers) for the purpose of reducing project traffic on Cypress Avenue, Prospect Way, Broadway to Cornell Avenue, Harvard Avenue, and Yale Avenue. Project traffic impact levels, which are less than significant with mitigation as discussed in the DEIR, would be further reduced.

UTILITIES AND SERVICE SYSTEMS

Sewer

Replacement of Septic Drainfields with Title 22 Treated Wastewater Disposal to Granada Sanitary District (GSD) System: Regarding wastewater disposal, all sub-surface wastewater disposal has been eliminated from the project, including the three drain fields and rain gardens. All wastewater will be treated to a level meeting Title 22 requirements. Topical Response 15, Project Potable and Recycled Water Demand, states that 26,000 gpd is the upper limit of wastewater generation. Wastewater generation would be reduced in drought years to 21,000 gpd, due to water conservation measures. With the use of recycled water for toilet flushing and additional uses such as landscape irrigation, and solar panel and surface washing at the sites, excess wastewater would be reduced to zero under average and drought year conditions. The applicant proposes to connect to the GSD sewer system for 8 equivalent dwelling units (EDUs), where 8 EDUs is equivalent to 1,768 gallons per day, for the discharge of unused Title 22 treated water as needed.² The applicant also proposes an emergency connection to provide for a backup wastewater management system in the instance that the on-site wastewater treatment system fails or is over capacity. Reference Response to Comment 209-13 regarding GSD capacity to provide a level of service accommodating 8 EDUs. The emergency connection would be subject to GSD review,

² EDUs are used to calculate the connection fee charged by the Granada Sanitary District. Taxes for eight (8) EDUs have been assessed by GSD to the property. One (1) EDU is equivalent to 221 gallons per day.

approval, and conditions of approval at the time of GSD permit application and a condition of approval of the project would require proof of the applicant having secured such a connection from GSD. Mitigation Measures UTIL-1 through 6 would continue to apply to the project. Therefore, project impacts to sewer services, which are less than significant with mitigation, would remain the same.

Water

On-site Pool or Fire Tank as Fire Supply: The fire system has the following benefits to conventional municipal water supply: The proposed system would not rely on a water system connection and therefore would not strain existing municipal water supplies. Therefore, the proposed on-site options for water storage would not further impact water services to the site.

Impacts of Landscape Buffers and Drip Irrigation: Landscape irrigation would only utilize recycled water. The amount of treated wastewater available for irrigation is adequate to support the additional landscaping. The additional landscaping will therefore not result in any additional impacts to water services or supplies.

Water System will be Operated by a Mutual Water Company: Community operation insures compliance and additional redundancy. The proposed water system described in the DEIR had impacts that were less than significant. The above clarification has impacts that are the same and still less than significant.

Additional Details Regarding Water Recycling Systems: For the protection of water and wastewater facilities, all water recycling systems will be buried and capable of continuous operation in a submerged state. The minimum elevation of the water recycling system manholes will be 18 feet (3.5 feet above the maximum recorded tsunami inundation). All pumps will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.

Also, the well is located at elevation 26 feet (11.5 feet above the maximum tsunami elevation). The well utilizes a submersible pump capable of continuous operation in a submerged state. The well pump will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs. As additional backup, the project includes 2 days of water and wastewater storage capacity that will provide water supply and prevent wastewater spillage from occurring until after the tsunami event has subsided. Additional details have been provided to comply with Mitigation Measure HYDRO-9 and further protect water supplies in the event of a tsunami or flood. Therefore, project impacts to project water usage would remain at less than significant with mitigation as discussed in the DEIR.

Elimination of RO Well Water Treatment: The project includes treatment to improve well water quality that includes microfiltration and UV disinfection. The RO treatment discussed in the DEIR is no longer part of the treatment process. As stated on page IV.N-37 of the DEIR, based on the June 2009 testing of the existing well water, the water quality is suitable for domestic-community water supply, without the

need for RO treatment. The observed high levels of color, iron and manganese could be addressed with conventional water treatment methods. Water quality would continue to be regulated by applicable State agencies (i.e., RWQCB and CDPH). Therefore, water treatment is a less than significant impact and no mitigation measures are needed.

Solid Waste

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios as construction is a temporary activity with temporary impacts. The impacts related to project generation of solid waste would remain at less than significant as discussed in the DEIR.

Energy

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios as construction is a temporary activity with temporary impacts. The impacts related to project use of energy would remain at less than significant as discussed in the DEIR.

Elimination of Natural Gas for Heating and Building Operations Due to Solar Power: Natural gas would be used for backup purposes only. Therefore, natural gas usage in the residences and offices would be reduced from levels described in the DEIR. Therefore, project impacts to energy usage, which are less than significant, would be further reduced.

Anti-glare, Anti-reflective Surface to be Used on Solar Panels: An anti-glare, anti-reflective surface would be used on all solar panels in order to minimize glare and reflection from the panels. This specification would not reduce efficiency of the solar panels. Therefore, project impacts to energy usage, which are less than significant, would be further reduced.

CUMULATIVE IMPACTS

The cumulative impacts of the implementation of the changes to the DEIR, as described in Sections III.A and B of the FEIR, remain comparable to or less than project impacts as discussed in the DEIR. However, specific discussion of cumulative construction-related noise/air quality/traffic impacts associated with the 3/7.4/20-Year Construction Scenarios is appropriate. As described in Topical Response 12, Construction Phasing for the Office Park, the project construction timeframe may exceed the timeframe described in the DEIR of 30-36 months or approximately 3 years (a high economic demand for mixed-use office space, concurrent construction scenario). Instead, the project construction timeframe may last approximately 7.4 years, which is described as the Worst-Case Noise Impact Scenario (under lower economic demand for mixed-use office space and non-concurrent, continuous construction, in which each building is constructed separately with no gaps in between). Under this scenario, buildings are completed within a 7.4-year timeframe, with lower noise levels in the short-term, but extended over a longer duration. It is possible that construction of some of the 37 related projects (listed in Table III-1 on pages III-15 and 16 of the DEIR) may also be delayed due to similar economic conditions. Therefore, under this scenario, cumulative noise/air quality/traffic impacts discussed in the DEIR would be at similar levels but will take place further into the future. However, due to the phased construction of the Office Park buildings, project construction noise/air quality/traffic impact for any period would be reduced from the project construction noise/air quality/traffic impact under the 3-year construction scenario described in the DEIR due to non-concurrent construction of the four Office Park buildings. Therefore, potential cumulative construction noise/air quality/traffic impact under the 7.4-year scenario would be less than significant.

Under the 20-year construction scenario (under a low-economic demand and non-concurrent, non-continuous construction scenario), it is likely that within this longer construction timeframe most or all of the 37 related projects would have been constructed by the time the Office Park is fully built out. Therefore, it would be difficult to assess cumulative construction noise/air quality/traffic impacts without knowledge of the future related projects. However, cumulative construction noise/air quality/traffic impacts over this timeframe are anticipated to be less than significant due to the experience of a reduced level of construction noise/air quality/traffic impacts (due to non-continuous, non-concurrent Office Park building construction) over the longer timeframe.