



THE CITY OF SAN DIEGO

ADDENDUM

Project No. 623196
Addendum to MND No. 498142
SCH No.: Not applicable

SUBJECT: Illumina Amendment: A request for a NEIGHBORHOOD DEVELOPMENT PERMIT (NDP) to accommodate an increase in the development footprint for an energy fuel cell and modifications of the previously approved brush management zones. More specifically, the increased development area would allow for the installation of a 3.5-megawatt solid-oxide fuel cell "Energy Server" system at the rear of an existing building and parking structure at the Illumina campus. The 0.20-acre fuel cell project area is within the overall 42.6-acre Illumina campus located at 5200 Illumina Way (Assessor Parcel Numbers 345-260-20-00 and 345-260-34-00). The site is designated Industrial and zoned IP-1-1 (Industrial) within the University Community Plan area. (LEGAL DESCRIPTION: Parcels 1-15 of Parcel Map No. 14847.) Applicant: Bloomenergy.

I. SUMMARY OF ORIGINAL PROJECT

ARE Illumina – Mitigated Negative Declaration

The adopted Mitigated Negative Declaration (MND) No. 498142 for the ARE-Illumina project required a Community Plan Amendment (CPA) to the University Community Plan for the transfer of 987 average daily traffic (ADT) from Subarea 47 to 37 (the Illumina campus) for a total of 8,657 ADT development intensity. A SITE DEVELOPMENT PERMIT and a PLANNED DEVELOPMENT PERMIT (SDP/PDP) to amend Planned Industrial Permit No. 99-0034 was required to allow for the expansion of the existing Research and Development (R&D) manufacturing, corporate and supporting office uses that currently exist within the project site.

As identified earlier, the project involved the transfer of 987 ADT from the University Community Plan Subarea 47 to the Illumina campus in Subarea 37 to allow for an increase in development intensity at the site. The transfer of 987 ADT would result in a total development intensity allocation equivalent to 8,657 ADT. The project was conditioned to ensure the vehicle trip generation of the existing and proposed uses on-site would not exceed the total allocated 8,657 ADT.

The proposed building and parking structure expansion included Building 7 and P2B. Building 7 would include 237,146 square feet (sf) of corporate headquarters and 114,300 sf of scientific R&D, as well as 44,024 sf of mechanical, and 56,362 sf of accessory ancillary uses. The P2B parking structure would contain 2,750 parking spaces. Building 7 is proposed to be 10 stories while the parking structure is proposed to be 8 stories. The buildings would be required to comply with the Illumina Campus Design Guidelines, which were revised to incorporate the expansion.

Vehicular access to the site remained the same as the existing conditions, with access continuing to be provided by three driveways along Judicial Drive. The primary access would continue to operate as a signalized intersection at Judicial Drive and Research Place/Illumina Way. Additional access was provided on Judicial Drive through two right-in/out only access points. Access would be controlled through security personnel or other technical security methods. Internal vehicular, pedestrian, and bicycle circulation would also be maintained between structures, with slight modifications to connect the proposed structures to other existing uses.

II. PROJECT DESCRIPTION

The project's regional location and location on a U.S. Geological Survey (USGS) map is shown on Figures 1 and 2. The project's location on an aerial photograph is shown on Figure 3.

A request for a NEIGHBORHOOD DEVELOPMENT PERMIT (NDP) to accommodate the increase in the development footprint for an energy fuel cell and modifications of the previously approved brush management zones per Section 126.0113(a) (Site Plan, Figure 4).

The increase development area would allow for the installation of a 3.5-megawatt solid-oxide fuel cell "Energy Server" system at the rear of an existing building (Building 3) and the parking structure at the Illumina campus. The 0.20-acre project site was previously graded as a manufactured slope in conjunction with the original Nobel Research Park approval analyzed in MND No. 99-0034/SCH No. 99051080 in 1999.

The solid oxide fuel cells (SOFC) are electrochemical devices that convert chemical energy of a fuel and oxidant directly into electrical energy. Because SOFCs produce electricity through an electrochemical reaction and not through a combustion process, SOFCs are considered more efficient and environmentally benign than conventional electric power generation processes. SOFCs inherent characteristics make them uniquely suitable to address the environmental, climate change, and water concerns associated with fossil fuel based electric power generation.

The fuel cell project is located at 5200 Illumina Way (Assessor Parcel Numbers 345-260-20-00 and 345-260-34-00) in the IP-1-1 zone, within the University Community Plan area, on a 42.6-acre property. The fuel cells will provide clean distribution generation (power) for the facility working in tandem with the existing electricity grid (also known as "grid-parallel"). Of the total property, the fuel cell project is 0.20 acre.

III. ENVIRONMENTAL SETTING

The 0.20-acre fuel cell project area is within the overall 42.6-acre Illumina campus located at 5200 Illumina Way. The Illumina campus property is predominately developed land consisting of parking lots and R&D buildings. An open space lot (Lot 1) is located at the northernmost point of the project site that contains Diegan coastal sage scrub and disturbed Diegan coastal sage scrub. A conservation easement (Lot 9) is located in the southeastern portion of the project site that contains chamise chaparral, non-native grassland, and San Diego mesa hardpan vernal pools. The 0.20-acre fuel cell project area consists of a parking lot at the rear of existing Building 3 and the parking structure within the Illumina campus.

The site is designated Industrial and zoned IP-1-1 (Industrial Park) per the University Community Plan. In addition, the site is within the Airport Land Use Compatibility Overlay Zone, Airport Influence Area

(Review Area 1 – Marine Corps Air Station [MCAS] Miramar), Airport Noise Contours (60 to 65 and 65 to 70 decibel (dB) community noise equivalent level (CNEL), Federal Aviation Administration (FAA) Part 77 Notification Area (MCAS Miramar), Community Plan Implementation Overlay Zone – Type A (CPIOZ-A), Prime Industrial Lands, and Transit Priority Area. The site is situated in an urbanized setting of similar uses and is currently served by existing public services and utilities.

IV. ENVIRONMENTAL DETERMINATION

The City previously prepared and certified the ARE-Illumina MND (No. 498142; 2018 MND), per Resolution No. R-311609 on March 13, 2018. Based on all available information, the analysis in this MND Addendum, and in light of the entire record, the City has determined pursuant to Section 15162 and 15164 of the State CEQA Guidelines that:

- There are no substantial changes proposed in the project which will require major revisions of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes have not occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental document was certified as complete or was adopted, that shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous environmental document;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous environmental document;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous environmental document would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Based upon a review of the current project, none of the conditions described in Sections 15162 and 15164 of the State CEQA Guidelines apply. No changes in circumstances have occurred, and no new information of substantial importance has manifested which would result in new significant or substantially increased adverse impacts as a result of the project. Therefore, this Addendum has been prepared in accordance with Section 15164 of the CEQA State Guidelines. The 2018 MND, has

incorporated by reference pursuant to CEQA Guidelines Section 15150. Public review of this Addendum is not required per CEQA.

V. IMPACT ANALYSIS

The following includes the environmental issues analyzed in detail in the previously certified 2018 MND as well as the project-specific environmental analysis pursuant to the CEQA. The analysis in this document evaluates the adequacy of the 2018 MND relative to the project and documents that the proposed modifications and/or refinements would not cause new or more severe significant impacts than those identified in the previously certified environmental document.

The 2018 MND identified significant but mitigable impacts to Paleontological Resources.

An overview of the Illumina Amendment project impacts in relation to the previously certified 2018 MND is provided in Table 1, Impact Assessment Summary.

Table 1 Impact Assessment Summary				
Environmental Issues	2018 MND Finding	Project	New Mitigation?	Project Resultant Impact
Aesthetics	Less than significant	No new impacts	No	Less than Significant
Agricultural and Forest Resources	No Impact	No new impacts	No	No Impact
Air Quality	Less than significant	No new impacts	No	Less than significant
Biological Resources	Less than significant	No new impacts	No	Less than Significant
Cultural Resources	Less than significant	No new impacts	No	No impact
Geology/Soils	Less than significant	No new impacts	No	Less than Significant
Greenhouse Gas Emissions	Less than significant	No new impacts	No	Less than Significant
Hazards and Hazardous Materials	Less than significant	No new impacts	No	Less than significant
Hydrology/Water Quality	Less than significant	No new impacts	No	Less than significant
Land Use	No Impact	No new impacts	No	No Impact
Mineral Resources	No Impact	No new impacts	No	No Impact
Noise	Less than significant	No new impacts	No	Less than significant
Paleontological Resources	Significant but mitigated	No new impacts	No	Less than significant
Public Services	No Impact	No new impacts	No	No Impact

Table 1 Impact Assessment Summary				
Environmental Issues	2018 MND Finding	Project	New Mitigation?	Project Resultant Impact
Recreation	Less than significant	No new impacts	No	No Impact
Transportation/Traffic	Less than significant	No new impacts	No	Less than significant
Tribal Cultural Resources	Less than significant	No new impacts	No	No Impact
Utilities and Services Systems	Less than significant	No new impacts	No	Less than significant

Aesthetics

2018 MND

The 2018 MND disclosed that the University Community Plan does identify any designated public view corridors or scenic vistas associated with the site, nor are no designated scenic highways within the vicinity of the project site. The existing visual character consists of paved parking lots that lacked scenic quality and, therefore, the project would not degrade the existing visual character or quality of the site and its surroundings. Lastly, the project would comply with the outdoor lighting standards contained in Municipal Code Section 142.0740 (*Outdoor Lighting Regulations*) and Municipal Code Section 142.0730 (*Glare Regulations*). Overall, impacts were determined to be less than significant.

Project

The project is limited to installation of a 3.5-megawatt solid-oxide fuel cell “Energy Server” system at the rear of an existing building and parking structure at the Illumina campus. The proposed Energy Server system is substantially smaller in size and lower in height than existing buildings and facilities located within the existing Illumina campus, and would be located at the base of the existing graded slope below the open space preserve in the southeastern portion of the campus. The fuel cell project would not be visible from adjacent areas. Additionally, the proposed retaining wall with a maximum of 12 feet in height would be located at the base of an existing cut slope and behind the existing adjacent building and, therefore, would not be visible from public viewing areas and would not alter the existing visual character. The Energy Server system would be similar in character to the existing Illumina campus development and would be subject to the Illumina Campus Design Guidelines to ensure compatibility with existing land uses on-site, as well as off-site. The project would not degrade the existing visual character or quality of the site and its surroundings. Furthermore, the Energy Server system would not introduce a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Overall, the project would result in less than significant aesthetic impacts.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Air Quality

2018 MND

Although a CPA was approved that would allow more development intensity through an ADT transfer to the site, it would decrease the allocated development intensity of Subarea 47 resulting in

no net change in development intensity in the community. As such, the project was determined to be consistent with the growth anticipated by the community plan and SANDAG. Furthermore, the proposed campus expansion would not result in any significant construction or operational air quality impacts. Air quality impacts were determined to be less than significant.

Project

Construction of the fuel cell component would be shorter in duration and require less equipment compared to the overall ARE-Illumina project evaluated in the 2018 MND. It is not anticipated that the fuel cell project would be constructed concurrently with any Illumina campus facilities evaluated in the 2018 MND that have not yet been constructed. However, should construction of the fuel cell happen concurrent with any yet to be constructed Illumina campus facilities, the incremental contribution of fuel cell construction emissions in conjunction with additional construction activities on the Illumina campus would not exceed any applicable air quality emission thresholds. Therefore, impacts associated with construction of the fuel cell component would be less than significant. The fuel cell component would not generate any operational emissions and would reduce reliance on traditional energy sources, and thereby reduce emissions associated with operation of the overall ARE-Illumina project.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Biological Resources

2018 MND

The 2018 MND identified that the project site, although developed, contained five vegetation land cover types consisting of Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, chamise chaparral, non-native grassland, and San Diego mesa hardpan vernal pools. The Diegan coastal sage scrub and disturbed Diegan coastal sage scrub is located within an open space lot (Lot 1) located at the northernmost point of the project site; whereas the chamise chaparral, non-native grassland, and San Diego mesa hardpan vernal pools are located within a conservation easement (Lot 9) in the southeastern portion of the project site. The 2018 MND identified approximately 9.2 acres of impacts to Developed Land (Tier IV) within the project site; however, mitigation was not required per the City's Biology Guidelines, as Tier IV habitat is not considered sensitive. The associated grading and construction activities would not impact the open space and conservation easement portions of the site, as grading and construction activities would not occur adjacent to or within these lots containing the vegetation and habitat types listed above. Therefore, no impacts to riparian habitat or other habitat community would occur. Although the site had the potential to contain sensitive plant and/or wildlife species none were observed on-site. As it relates to wildlife movement corridors the site does not function as a significant wildlife movement corridor. The site is surrounded by residential development, roads, and fencing, which ultimately restrict its use by wildlife. The site is not identified as a significant regional wildlife corridor by the City's Multiple Species Conservation Program (MSCP) Subarea Plan and does not provide a throughway for wildlife species into major areas of off-site habitats. Therefore, the project would not interfere within the movement of any native resident or migratory species, impact an existing wildlife corridor, or impede the use of a native wildlife nursery site, resulting in no impact. Overall, impacts to biological resources were determined to be less than significant.

Project

A field survey was conducted, and a biological letter report was prepared by RECON Environmental (February 2019) to assess the vegetation communities within the boundaries of the project site and identify any potential impacts due to implementation of the project. Five sensitive vegetation communities were identified on-site: Diegan coastal sage scrub, (Tier II), disturbed Diegan coastal sage scrub (Tier II), chamise chaparral (Tier IIIA), non-native grassland (Tier IIIB), and urban/developed (Tier IV). In addition, San Diego mesa hardpan vernal pools with San Diego fairy shrimp occur within the non-native grassland in the southern portion of the parcel within a fenced preserve within the mapped Multi-Habitat Planning Area (MHPA). No sensitive wildlife species, plants or vegetation occur within the area of potential effect for the fuel cell project.

Direct impacts to sensitive biological resources would not occur as the proposed fuel cell project would be located within an already developed portion of the Illumina campus. More specifically, the project would result in direct impacts to approximately 0.20 acre of urban/developed land (Tier IV), which is not considered a sensitive biological resource per the City's Biology Guidelines; therefore, mitigation would not be required. The brush management zones associated with the approved project would need to be altered to accommodate the fuel cell as shown in Figure 4. As indicated previously, the project site is adjacent to a vernal pool preserve within the MHPA (Figure 5), and in accordance with the City's Vernal Pool Habitat Conservation Plan, brush management zone 2 is not permitted within the MHPA containing vernal pools. Therefore, a modified brush management zone 2 would be implemented.

In addition, the vernal pool preserve and the associated watershed is fenced with buffers ranging from 25 to 142 feet between the project site and the vernal pools. Implementation of the project would not adversely affect the existing vernal pool preserve on-site. The closest MHPA is approximately 10 feet from the project site and compliance with the Vernal Pool Habitat Conservation Avoidance and Minimization Measures and the MHPA Land Use Adjacency Guidelines would preclude indirect project impacts. With implementation of these measures as a condition of the permit, indirect impacts would be avoided.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Cultural Resources

2018 MND

The 2018 MND identified eight previously recorded prehistoric archeological sites located within the project site, identified as CA-SDI-12,428, -12,429, -12,430, -12,431, -12,432, -12,433, -12,434, and -12,435. However, all eight of these identified sites were destroyed during the construction of the Nobel Drive project in 1999-2000. In addition, the Native American Heritage Commission (NAHC) conducted a Sacred Lands Files search, of which the results were negative. Additionally, the existing structures were constructed post-1999 and were not 45 years in age and, therefore, not subject to evaluation under the City's Historical Resources Regulations. No impacts to cultural resources were identified.

The 2018 MND identified that the project would involve approximately 105,000 cubic yards of cut and would excavate to a maximum depth of 18 feet. Considering the high paleontological sensitivity rating for underlying geology and the geologic formations encountered in borings conducted during

the geotechnical investigation, the project grading activities had the potential to disturb or destroy paleontological resources. Disturbance or loss of fossils would be considered a significant environmental impact. Therefore, a Mitigation Monitoring Reporting Program (MMRP), was required to be implemented during ground-disturbing activities. With implementation of the monitoring program, potential impacts on paleontological resources were reduced to less than significant.

Project

The fuel cell project would be located within a portion of the Illumina campus that was previously graded as a manufactured slope and, therefore, would not result in any impacts related to cultural resources since none were identified in the 2018 MND. The fuel cell project is anticipated to result in approximately 1,688 cubic yards of cut with a maximum depth of 14 feet; thus, the project could result in potential impacts to paleontological resources, and paleontological monitoring during ground-disturbing activities would be required. Therefore, the project would be required to implement the paleontological resources mitigation measures as described in the 2018 MND. Therefore, a MMRP as detailed in Section VI of the Addendum would be required. With implementation of the monitoring program, potential impacts to paleontological resources would be reduced to less than significant.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Geology/Soils

2018 MND

A site-specific Geotechnical Investigation Report was prepared that identified six known active faults located within a 50-mile radius of the project site. The closest known active faults nearest the project site are the Newport-Inglewood Fault and Rose Canyon Fault, both located approximately three and a half miles west of the project site. However, any construction associated with the project would be required to be built in accordance with the applicable California Building Code that would reduce impacts to people or structures to an acceptable level of risk.

Within the project site, the potential for liquefaction or seismically induced settlement was considered to be very low, due to the dense nature of the existing fill located underneath the project site, the characteristics of the Scripps formation on which the project site sits, and the lack of groundwater within 50 feet of the ground surface. As such, the likelihood of the project exposing people to seismic-related ground failure or liquefaction was considered to be low. Also, the site did not contain previous landslide debris and the topography of the site is generally flat; as such, the project was not anticipated to subject people or structures to landslides. Furthermore, all grading activities within the site would be required to comply with the City of San Diego Grading Ordinance, which would ensure soil erosion and topsoil loss be minimized. Overall, Implementation of proper engineering design and utilization of standard construction practices, to be verified at the building permit stage, would ensure that the potential for impacts from regional geologic hazards would remain less than significant.

Project

The fuel cell project would be accommodated within a portion of the Illumina campus that was previously graded as a manufactured slope. A retaining wall (up to 12 feet in height) would be

required to implement the fuel cell project. A Geotechnical Engineering Evaluation, Addendum #1, and Addendum #2 was prepared (Kleinfelder, Inc.: 2018 and 2019) for the project. The closest known active faults nearest the project site are the Newport-Inglewood Fault and Rose Canyon Fault, both located approximately three and a half miles west of the project site. The site is not located within an Alquist-Priolo Earthquake Fault Zone. Groundwater was not encountered during the field investigation and is anticipated to be at depths greater than grading and construction proposed. The potential for liquefaction or seismically induced settlement was considered negligible due to lack of groundwater and presence of very dense formational materials. Previous development on the site has resulted in the creation of cut slopes which the fuel cell project would cut into and the field reconnaissance observed that the approximately 7 feet consists of very old paralic deposits and the lower 12 feet of Scripps Formation; landslides are not present on or near the project area and are not anticipated from implementation of the project. Furthermore, all grading activities within the site would be required to comply with the City of San Diego Grading Ordinance, which would ensure soil erosion and topsoil loss be minimized. Construction associated with the project would implement proper engineering design and utilize standard construction practices, to be verified at the building permit stage that would reduce impacts to people or structures to an acceptable level of risk; therefore, impacts from regional geologic hazards would remain less than significant.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Greenhouse Gas Emissions

2018 MND

The City's adopted Climate Action Plan (CAP) outlines the actions the City will undertake to achieve its proportional share of state greenhouse gas (GHG) emission reductions through the following five CAP strategies: energy- and water-efficient buildings; clean and renewable energy; bicycling, walking, transit, and land use; zero waste (gas and waste management); and climate resiliency. The City's adopted CAP Consistency Checklist ensures project-by-project consistency with the underlying assumptions in the CAP and thereby ensuring the City achieves the emission reduction targets identified in its CAP.

While the project included a CPA, the CPA was necessary to transfer allowed development from one area in the University community planning area to another, however, the overall allowed development in the community would remain the same. As no change in the overall growth in the community would occur, the project was determined to be consistent with the SANDAG Series 12 growth projections used to determine the CAP projections. Therefore, the project was consistent with the growth projections and land use assumptions utilized in the CAP under Step 1. Furthermore, completion of Step 2 of the CAP Consistency Checklist demonstrated that the ARE-Illumina project would be consistent with applicable strategies and actions for reducing GHG emissions. This included project features consistent with the energy and water efficient buildings strategy, as well as bicycling, walking, transit, and land use strategy. Step 3 of the CAP Consistency Checklist was not applicable. Based on the project's consistency with the City's CAP Consistency Checklist, the project's contribution of GHGs to cumulative statewide emissions would be less than cumulatively considerable. Therefore, the project's cumulative GHG emissions would have a less than significant impact on the environment.

Project

Under Step 1 of the CAP Consistency Checklist, the project was identified as being consistent with the existing General Plan and Peninsula Community Plan land use designations and zoning for the site. Therefore, the project is consistent with the growth projections and land use assumptions used in the CAP. Furthermore, completion of Step 2 of the CAP Consistency Checklist demonstrates that the project would be consistent with applicable strategies and actions for reducing GHG emissions. This includes project features consistent with the energy and water efficient buildings strategy, as well as bicycling, walking, transit, and land use strategy. Additionally, the project incorporates a roof-mounted photovoltaic system consisting of solar panels sufficient to generate at least 30 percent of the project's projected energy consumption. These project features would be assured as a condition of project approval. Thus, the project is consistent with the CAP. Step 3 of the CAP Consistency Checklist would not be applicable, as the project is not proposing a land use amendment or a rezone.

Based on the project's consistency with the City's CAP Consistency Checklist, the project's contribution of GHGs to cumulative statewide emissions would be less than cumulatively considerable. Therefore, it was determined that project's cumulative GHG emissions would have a less than significant impact on the environment.

A CAP Consistency Checklist was completed for the proposed fuel cell project. Under Step 1, the CAP Consistency Checklist determined that the project would be consistent with the General Plan designation of Heavy and Light Industry. Similarly, the project would be consistent with the University Community Plan land use designation of Scientific Research, as well as the requirements of the IP-1-1 zoning designation. Since the fuel cell project does not result in the construction or expansion of a building, completion of Step 2 of the CAP Consistency Checklist would not be required. Subsequently, Step 3 of the CAP Consistency Checklist would not be applicable. Based on the project's consistency with the City's CAP Consistency Checklist, the project's contribution of GHGs to cumulative statewide emissions would be less than cumulatively considerable. Therefore, the project's cumulative GHG emissions would have a less than significant impact on the environment.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Hazards and Hazardous Materials

2018 MND

The 2018 MND identified that the ARE-Illumina project could require the use of hazardous materials (fuels, lubricants, solvents, etc.), which would require proper storage, handling, use, and disposal; however, the project would not routinely transport, use, or dispose of hazardous materials. In addition, appropriate handling techniques shall be implemented for any unknown subsurface discoveries, to meet local, state, and federal regulations. Therefore, the project would not create a significant hazard to the public or environment.

A Geotracker database search was also completed in June 2017, which identified that the project site does not contain any sites listed that contain hazardous materials that have been compiled pursuant to Government Code Section 65962.5. There are no schools within a quarter mile of the project site.

Although the site is not within the vicinity of private airstrip, the site was identified as being within the Airport Land Use Compatibility Overlay Zone of MCAS Miramar Airport Land Use Compatibility Plan (ALUCP) and subject to the ALUCP regulations. In addition, the site is also within Airport Influence Area (AIA) Review Area 1, and the 60 to 65 dB and 65 to 70 CNEL noise contour area. Review Area 1 consists of locations where noise and/or safety concerns may be cause for limiting the types of allowable land uses within the area. Since the project would be required to comply with the regulations identified in the ALUCP and the site is located outside of the designated Accident Potential Zones, the potential for exposing people to hazards would be less than significant.

The project did not include any off-site changes to existing roadways and did not impact access to the site. An additional secondary access point to the proposed parking structure was identified to be constructed in order to allow for ease of access. The structures and site access were determined to be in compliance with the City's and California Building Code emergency access requirements. Therefore, the project would not impair or interfere with an adopted emergency response plan or emergency evacuation plan. Per the Official Very High Fire Hazard Severity Zone Map, the site is located within a very high fire hazard severity zone. However, the project would not place residences within any wildland area, and would comply with the City's building codes and brush management requirements intended to reduce fire risks. Overall, the 2018 MND concluded that the Illumina campus expansion would not create any significant impacts relative to hazards and hazardous materials and that the project would represent a minimal risk to the public and environment. Impacts were determined to be less than significant.

Project

The fuel cell project site is located within the boundaries of the overall ARE-Illumina project evaluated in the 2018 MND and would not introduce any housing. Therefore, impacts related to hazardous material sites, exposure of schools to hazardous materials, airport hazards, roadway hazards, and wildland fires would be the same as those identified for the overall ARE-Illumina project evaluated in the 2018 MND. All construction activities and operational maintenance would be conducted consistent with applicable federal, state, and local regulations pertaining to the proper use, transport, and disposal of hazardous materials.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Hydrology and Water Quality

2018 MND

According to the City's Storm Water Requirements Applicability Checklist, the ARE-Illumina was identified as a Priority Development Project and, therefore, required to prepare a Storm Water Quality Management Plan (SWQMP) and associated Storm Water Pollution Prevention to identify and implement required structural best management practices (BMPs) for storm water pollutant control (BMP Design Manual Chapter 5, Part 1 of Storm Water Standards) as well as low impact development source control BMPs. The requirements would be implemented during construction and post-construction, which were reviewed by qualified staff and would be re-verified during the ministerial process. Adherence with the standards would ensure that water quality standards would not violate and preclude a cumulatively considerable contribution to water quality; therefore, a less than significant impact would result.

As it pertains to hydrology, a site-specific Drainage Study was prepared that identified that the drainage characteristics (i.e., overall impervious area and flow pattern) would remain similar as compared to the pre-project condition, as the proposed parking structure and R&D/Office facility would be constructed in an area with existing impervious surface in the form of a paved parking lot. Based on the drainage calculations, the project would disturb 9.2 acres of the site, and the post-project condition would contain 1.1 acres of pervious area and 8.2 acres of impervious area, for an approximate increase of 0 percent in impervious area. Runoff from the project would be directed into an underground detention vault that discharges into a biofiltration basin for treatment before entering the storm drain system and discharging into Rose Creek. Therefore, since the storm water runoff would remain similar as compared to the pre-project conditions, no impacts to groundwater recharge are expected as a result of implementing the project. Lastly, the project site is not located within a Federal Emergency Management Agency (FEMA) designated floodplain or floodway, per the FEMA Flood Insurance Rate Map (Number 06073C1602G). Overall, the project was determined to have a less than significant impact to hydrology and water quality.

Project

The proposed fuel cell project component would not alter the existing grading footprint on the Illumina campus and as such would not affect the existing runoff and drainage patterns on the site. The project site for the fuel cell project was previously disturbed to create the existing manufactured slope below the open space preserve in the southeastern portion of the site. The additional excavation into the manufactured slope for the proposed retaining wall (up to 12 feet in height) would not affect the on-site drainage pattern.

Potential impacts to existing water quality standards associated with the project would include minimal short-term construction-related erosion/sedimentation and no long-term operational storm water discharge. According to the City's Storm Water Requirements Applicability Checklist, the project is considered to be a Standard Priority Development Project and therefore required to implement site design and source control BMPs for storm water pollutant control of the City's Storm Water Standards Manual. These requirements would be implemented during construction and post-construction, which have been reviewed by qualified staff and re-verified during the ministerial process. Adherence with the standards would ensure that water quality standards are not violated and preclude a cumulatively considerable contribution to water quality; therefore, a less than significant impact would result.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Land Use

2018 MND

The 2018 MND determined that implementation of the ARE-Illumina project would not result in impacts related to dividing an established community, conflicts with applicable local and regional land use plans, or conflicts with an applicable habitat conservation plan or natural community conservation plan. Therefore, it was determined that no impact would occur.

Project

The project would be consistent with the General Plan designation of Heavy and Light Industry. Similarly, the project would be consistent with the University Community Plan land use designation of Scientific Research, as well as the requirements of the IP-1-1 zoning designation. The project is limited to the installation of a 3.5-megawatt solid-oxide fuel cell “Energy Server” system at the rear of an existing building and existing parking structure at the Illumina campus and would not conflict with applicable local and regional land use plans. As described in the discussion under biological resources, the project would not conflict with the MHPA.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Mineral Resources

2018 MND

The project site was identified as being located within an area designated as MRZ-3 per the California Geologic Survey Mineral Resource Map. MRZ-3 zones are areas that require further exploration to determine if mineral resources are present that could warrant a reclassification to an MRZ-2 designation (areas that contain significant mineral resources). The areas around the project are not utilized for the recovery of mineral resources and are not designated by the General Plan, University Community Plan, or other local, state, or federal land use plan for mineral resources recovery; therefore, the ARE-Illumina project was determined to not result in an impact to mineral resources as the project would not result in the loss of mineral resources.

Project

The fuel cell project site and overall ARE-Illumina project are not utilized for the recovery of mineral resources and are not designated by the General Plan, University Community Plan, or other local, state, or federal land use plan for mineral resources recovery. Furthermore, existing development surrounding the fuel cell project site associated with the ARE-Illumina project would make mineral resource extraction infeasible. Therefore, the project would not result in the loss of mineral resources.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Noise

2018 MND

A project-specific noise analysis was prepared for the project to determine if the ARE-Illumina project would result in potential construction or operational noise impacts. The MND identified that while construction may be heard over other noise sources in the area, the exposure would be temporary and would not exceed the applicable regulation of 75 A-weighted decibels 12-hour equivalent noise level [dB(A) $L_{eq}(12h)$] at the nearest property line of a residential use. Therefore, temporary increases in noise levels from construction activities would be less than significant.

Operational noise would be generated from mobile sources entering/exiting the project site, as well as stationary sources located within the project area. The MND identified that the project would

result in a less than 1 dB increase in traffic noise over the existing condition along all affected roadway segments. This increase in noise level would be less than perceptible; thus, the project would not contribute to a substantial increase in traffic noise.

Regarding stationary noise sources located on-site, since the project site is within an industrial zoning district and is adjacent to a multi-family residential zoning district, on-site noise was assessed for compliance with the applicable noise level limits of 65 dB(A) L_{eq} in the day, 62 dB(A) L_{eq} in the evening, and 60 dB(A) L_{eq} at night. Daytime on-site generated noise levels would range from 34 to 48 dB(A) L_{eq} and evening and nighttime noise levels would range from 31 to 45 dB(A) L_{eq} at the property line of residential uses. These noise levels would be well below the applicable noise level limits of 65 dB(A) L_{eq} in the day, 62 dB(A) L_{eq} in the evening, and 60 dB(A) L_{eq} at night. Noise levels at the property line of the Nobel Athletic Area and Library would range from 37 to 45 dB(A) L_{eq} in the day and 34 and 42 dB(A) L_{eq} at night. The City's Noise Abatement and Control Ordinance does not establish a limit for recreational land uses. As noise levels associated with operation of the project would comply with the City Municipal Code Section 59.5.0401, on-site generated noise impacts would be less than significant. Overall, noise impacts were determined to be less than significant.

Project

The currently proposed fuel cell project would be accommodated within an already graded (manufactured slope) portion of the Illumina campus. The fuel cell would be located at the rear of the developed pads in the southeastern portion of the Illumina campus behind a parking structure and campus building. There would be no on-site sensitive receptors in the vicinity of the fuel cell, and the nearest off-site receptor would be west of Judicial Drive, approximately 2,000 feet away.

The biological letter report prepared by RECON evaluated potential impacts related to noise on the MHPA (RECON 2019). Although there is chamise chaparral habitat within the adjacent MHPA in the southeastern corner of the property, it is isolated from large stands of suitable coastal sage scrub and chaparral habitats and immediately surrounded by development. Based on these constraints, the potential to support coastal California gnatcatcher within the on-site MHPA is low and this species is not anticipated to nest within the on-site MHPA. Therefore, no direct or indirect noise impacts are anticipated for this species. Furthermore, the MHPA benefits from the fact that it is located at a higher elevation than the entire project site; therefore, it is not anticipated that the MHPA will be indirectly impacted by excessive noise.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Population and Housing

2018 MND

The ARE-Illumina project would not directly induce substantial population growth, as the project did not include housing and, therefore, would not result in additional residents in the city beyond that already planned through the University Community Plan and General Plan. While the proposed increase in office space would allow for additional occupants and employees within the project site, this addition of people within the project site is allowed through a transfer of allowed trips from another site within the community. The area is already urbanized, with utilities and other infrastructure available. The project would not result in increased infrastructure capacities or extensions that would allow for additional growth. Thus, the project would not induce substantial

population growth within the community. Further, the project site did not contain existing housing, and the project would not displace housing. Overall, it was determined that no impacts would occur to population and housing.

Project

The project is limited to installation of a 3.5-megawatt solid-oxide fuel cell Energy Server system and does not include any housing. Similarly, no housing exists on the overall ARE-Illumina project, and construction of the fuel cell would not displace any structures.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Public Services

2018 MND

The 2018 MND concluded that the proposed increase in intensity on the Illumina campus would not involve the provision of new or alteration of existing governmental facilities related to schools, police, fire, parks, or other public facilities. Therefore, impacts were determined to be less than significant.

Project

The limited size of the fuel cell would not increase demand for fire protection services beyond what is required for the overall ARE-Illumina project in the existing condition. Furthermore, the project is limited to installation of a 3.5-megawatt solid-oxide fuel cell Energy Server system and does not include any housing that would increase demand for fire protection, police protection, school, recreation, or any other public services.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Recreation

2018 MND

The 2018 project did not involve the provision or alteration of a new or existing park facility. The project would not result in an impact on existing recreation facilities, as the project would not introduce a new population base that would require additional recreation facilities (see Section XIII(a) of the 2018 MND). Further, the project did not include recreational facilities or require the construction or expansion of recreational facilities, as the project did not introduce a substantial increase in the population base within the vicinity of the project area (see Sections XIII(a) and IV(a) of the 2018 MND). As such, the project did not have an adverse physical effect on the environment due to the construction of recreational facilities.

Project

The project is limited to installation of a 3.5-megawatt solid-oxide fuel cell Energy Server system and does not include any housing that would increase demand for recreation. Furthermore, the project would not construct any recreational facilities.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Transportation/Traffic

2018 MND

The project site was entitled with a maximum trip generation volume of 7,670 ADT. The ARE-Illumina project involved a transfer of 987 ADT from the University Community Plan Subarea 47 to the Illumina campus in Subarea 37 to allow for an increase in development intensity at the site. The transfer of 987 ADT would result in a total development intensity allocation equivalent to 8,657 ADT.

A project-specific traffic impact analysis was prepared for the 2018 ARE-Illumina project to determine what, if any, impacts would result. As concluded in the 2018 MND, the ARE-Illumina project would not result in direct or cumulative impacts to roadway segments, intersections, or ramps. A less than significant impact was identified.

Project

The proposed inclusion of a fuel cell component to the Illumina campus would not alter the allowable trip generation associated with previous approval addressed in the MND. Construction traffic and operational traffic would be minimal for the fuel cell project and significant impacts would not occur. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Tribal Cultural Resources

2018 MND

The ARE-Illumina project was determined to not cause a substantial adverse effect to tribal cultural resources, as there were no recorded sites listed or sites eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined by the Public Resources Code.

The City of San Diego, as Lead Agency, determined that Tribal Cultural Resources pursuant to subdivision Public Resources Code Section 5024.1(c) would not be potentially impacted through project implementation, as the project site has been developed and is located within an urban area. Although no resources occurred on site, the project site was within a one-mile radius of recorded archaeological sites. Therefore, in accordance with the requirements of Public Resources Code 21080.3.1, the City of San Diego provided formal notification to the Lipay Nation of Santa Isabel and the Jamul Indian Village, both traditionally and culturally affiliated with the project area, requesting consultation via e-mail on July 14, 2017. Both Native American Tribes responded within the 30-day

formal notification period requesting consultation. During the consultation process, it was determined that tribal cultural resources would not be anticipated on-site; therefore, consultation under Public Resources Code 21080.3.1 was concluded. No impact would result.

Project

Assembly Bill 52 consultation for the overall Illumina campus determined that tribal cultural resources would not be anticipated on-site; therefore, consultation under Public Resources Code 21080.3.1 was concluded. The fuel cell project would be located within a portion of the Illumina campus that was previously graded as a manufactured slope. Therefore, the project would not require reinitiation of Assembly Bill 52 consultation. No impact would result.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

Utilities and Services System

2018 MND

The 2018 MND concluded that the proposed increase in intensity on the Illumina campus would not result in the construction of new or expansion of existing utilities and service systems (e.g., water, sewer, drainage) as the project proposed would not exceed the capacity of the existing systems.) With regard to water supply, Implementation of the ARE-Illumina project would not result in new or expanded water entitlements from the water service provider, as the project would not result in an increase of planned development within the University Community Plan.

As it pertains to solid waste, a project-specific waste management plan was prepared. ARE-Illumina would include 351,466 square feet of habitable building space for non-residential uses, generating approximately 351 tons of waste per year; and would be required to provide a minimum of 720 square feet of exterior refuse area and the same amount of recyclable material storage area (total of 1,440 square feet). Therefore, approximately 211 tons of waste per year would be generated from the project, exceeding the 60-ton-per-year threshold of significance for having a cumulative impact on solid waste services by 151 tons per year. However, with implementation of the strategies outlined in the Waste Management Plan (WMP) and compliance with all applicable City ordinances, solid waste impacts would be reduced to below a level of significance regarding collection, diversion, and disposal of waste generated from C&D, grading, and occupancy. Overall impacts were determined to be less than significant.

Project

As described in the discussion of hydrology/water quality above, the project would not increase the amount of impervious area, would not affect the on-site drainage pattern, and runoff would be directed into an underground detention vault. Therefore, the project would not require an expansion of existing drainage facilities. The project is limited to installation of a 3.5-megawatt solid-oxide fuel cell Energy Server system and does not include any housing that would increase demand for water supply or sewer services. Project construction would generate a minimal amount of solid waste that would not exceed the capacity of existing landfills, and operation of the project would not generate any solid waste; furthermore, the project would be required to comply with the all applicable City ordinances.

Based on the foregoing analysis and information, there is no evidence that the project would require a major change to the 2018 MND. The project would not result in a new significant impact, nor would a substantial increase in the severity of impacts from that described in the 2018 MND occur.

VI. MITIGATION, MONITORING, AND REPORTING PROGRAM INCORPORATED INTO THE PROJECT

The project shall be required to comply with the applicable mitigation measures outlined within the MMRP of the previously adopted MND (No. 498142) and those identified with the project-specific subsequent technical studies. The following MMRP identifies measures that specifically apply to this project.

A. GENERAL REQUIREMENTS – PART I Plan Check Phase (prior to permit issuance)

1. Prior to the issuance of a Notice to Proceed (NTP) for a subdivision, or any construction permits, such as Demolition, Grading or Building, or beginning any construction-related activity on-site, the Development Services Department (DSD) Director's Environmental Designee (ED) shall review and approve all Construction Documents (CD; plans, specification, details, etc.) to ensure the Mitigation Monitoring and Reporting Program (MMRP) requirements are incorporated into the design.
2. In addition, the ED shall verify that the MMRP Conditions/Notes that apply ONLY to the construction phases of this project are included VERBATIM, under the heading, **"ENVIRONMENTAL/MITIGATION REQUIREMENTS."**
3. These notes must be shown within the first three sheets of the construction documents in the format specified for engineering construction document templates as shown on the City website: <http://www.sandiego.gov/development-services/industry/standtemp.shtml>
4. The **TITLE INDEX SHEET** must also show on which pages the "Environmental/Mitigation Requirements" notes are provided.

B. GENERAL REQUIREMENTS – PART II Post Plan Check (After permit issuance/Prior to start of construction)

1. **PRE CONSTRUCTION MEETING IS REQUIRED TEN (10) WORKING DAYS PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.** The PERMIT HOLDER/OWNER is responsible to arrange and perform this meeting by contacting the CITY RESIDENT ENGINEER (RE) of the Field Engineering Division and City staff from MITIGATION MONITORING COORDINATION (MMC). Attendees must also include the Permit holder's Representative(s), Job Site Superintendent and the following consultants: Paleontological Monitor.

Note: Failure of all responsible Permit Holder's representatives and consultants to attend shall require an additional meeting with all parties present.

CONTACT INFORMATION:

- a) The PRIMARY POINT OF CONTACT is the **RE** at the **Field Engineering Division, 858-627-3200.**

b) For Clarification of ENVIRONMENTAL REQUIREMENTS, it is also required to call **RE and MMC at 858-627-3360.**

2. **MMRP COMPLIANCE:** This Project, Project Tracking System (PTS) Number 498142 and/or Environmental Document Number 498142, shall conform to the mitigation requirements contained in the associated Environmental Document and implemented to the satisfaction of the DSD's Environmental Designee (MMC) and the City Engineer (RE). The requirements may not be reduced or changed but may be annotated (i.e., to explain when and how compliance is being met and location of verifying proof, etc.). Additional clarifying information may also be added to other relevant plan sheets and/or specifications as appropriate (i.e., specific locations, times of monitoring, methodology, etc.).

Note: Permit Holder's Representatives must alert RE and MMC if there are any discrepancies in the plans or notes, or any changes due to field conditions. All conflicts must be approved by RE and MMC BEFORE the work is performed.

3. **OTHER AGENCY REQUIREMENTS:** Evidence of compliance with all other agency requirements or permits shall be submitted to the RE and MMC for review and acceptance prior to the beginning of work or within one week of the Permit Holder obtaining documentation of those permits or requirements. Evidence shall include copies of permits, letters of resolution or other documentation issued by the responsible agency: ***Not Applicable***
4. **MONITORING EXHIBITS:** All consultants are required to submit to RE and MMC, a monitoring exhibit on a 11x17 reduction of the appropriate construction plan, such as site plan, grading, landscape, etc., marked to clearly show the specific areas including the **LIMIT OF WORK**, scope of that discipline's work, and notes indicating when in the construction schedule that work will be performed. When necessary for clarification, a detailed methodology of how the work will be performed shall be included.

Note: Surety and Cost Recovery – When deemed necessary by the DSD Director or City Manager, additional surety instruments or bonds from the private Permit Holder may be required to ensure the long-term performance or implementation of required mitigation measures or programs. The City is authorized to recover its cost to offset the salary, overhead, and expenses for City personnel and programs to monitor qualifying projects.

5. **OTHER SUBMITTALS AND INSPECTIONS:** The Permit Holder/Owner's representative shall submit all required documentation, verification letters, and requests for all associated inspections to the RE and MMC for approval per the following schedule:

DOCUMENT SUBMITTAL/INSPECTION CHECKLIST		
Issue Area	Document Submittal	Associated Inspection/Approvals/Notes
General	Consultant Qualification Letters	Prior to Preconstruction Meeting
General	Consultant Construction Monitoring Exhibits	Prior to or at Preconstruction Meeting
Paleontology	Paleontology Reports	Paleontology Site Observation
Waste Management	Waste Management Reports	Waste Management Inspections
Bod Release	Request for Bond Release Letter	Final Inspections Prior to Bond Release Letter

C. SPECIFIC MMRP ISSUE AREA CONDITIONS/REQUIREMENTS

PALEONTOLOGICAL RESOURCES

I. Prior to Permit Issuance

A. Entitlements Plan Check

1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans, but prior to the first precon meeting, whichever is applicable, the Assistant Deputy Director (ADD) ED shall verify that the requirements for paleontological monitoring have been noted on the appropriate construction documents.

B. Letters of Qualification have been submitted to ADD

1. The applicant shall submit a letter of verification to MMC identifying the Principal Investigator (PI) for the project and the names of all persons involved in the paleontological monitoring program, as defined in the City Paleontology Guidelines.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project.
3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site-specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other institution or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

B. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a precon meeting that shall include the PI, Construction Manager (CM), and/or Grading Contractor, RE, Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any

grading/excavation related precon meetings to make comments and/or suggestions concerning the paleontological monitoring program with the CM and/or Grading Contractor.

- a. If the PI is unable to attend the precon meeting, the Applicant shall schedule a focused precon meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Identify Areas to be Monitored - Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits. The PME shall be based on the results of a site-specific records search as well as information regarding existing known soil conditions (native or formation).
3. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.

III. During Construction

A. Monitor Shall be Present During Grading/Excavation/Trenching

1. The monitor shall be present full time during grading/excavation/trenching activities as identified on the PME that could result in impacts to formations with high and moderate resource sensitivity. The CM is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances Occupational Safety and Health Administration safety requirements may necessitate modification of the PME.
2. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present.
3. The monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSVs shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. *Discovery Notification Process*

1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

C. *Determination of Significance*

1. The PI shall evaluate the significance of the resource.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
 - b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume.
 - c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils), the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
 - d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.

IV. *Night and/or Weekend Work*

- A. If night and/or weekend work is included in the contract.
1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 2. The following procedures shall be followed.
 - a. No Discoveries - In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax by 8 a.m. on the next business day.
 - b. Discoveries - All discoveries shall be processed and documented using the existing procedures detailed in Section III - During Construction.
 - c. Potentially Significant Discoveries - If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed.
 - d. The PI shall immediately contact MMC, or by 8 a.m. on the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.

- B. If night work becomes necessary during the course of construction
 - 1. The CM shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

V. Post Construction

- A. *Preparation and Submittal of Draft Monitoring Report*
 - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the paleontological monitoring program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring,
 - a. For significant paleontological resources encountered during monitoring, the paleontological recovery program shall be included in the Draft Monitoring Report.
 - b. Recording Sites with the San Diego Natural History Museum - The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the paleontological monitoring program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.
 - 2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.
 - 3. The PI shall submit revised Draft Monitoring Report to MMC for approval.
 - 4. MMC shall provide written verification to the PI of the approved report.
 - 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. *Handling of Fossil Remains*
 - 1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.
 - 2. The PI shall be responsible for ensuring that all fossil remains are analyzed to identify function and chronology as they relate to the geologic history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
- C. *Curation of fossil remains: Deed of Gift and Acceptance Verification*
 - 1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
 - 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. *Final Monitoring Report(s)*
 - 1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.

2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

VII. CERTIFICATION

Copies of the addendum, the 2018 MND, and associated project-specific technical appendices, if any, may be reviewed by appointment in the office of the Development Services Department, or purchased for the cost of reproduction.



E. Shearer-Nguyen, Senior Planner
Development Services Department

May 8, 2019

Date of Final Report

Attachments:

- Figure 1: Regional Location
- Figure 2: Project Location on USGS Map
- Figure 3: Project Location on Aerial Photograph
- Figure 4: Site Plan
- Figure 5: Project in Relation to MHPA/Vernal Pool Preserve
- ARE-Illumina Final Mitigated Negative Declaration (No. 49812).

VIII. REFERENCES

Kleinfelder, Inc.

- 2018 Geotechnical Engineering Evaluation, Addendum #1.
- 2019 Geotechnical Engineering Evaluation, Addendum #2.

RECON Environmental (RECON)

- 2018 ARE-Illumina Final Mitigated Negative Declaration (No. 49812).
- 2019 Results of the Biological Survey for the Illumina Fuel Cell Project.

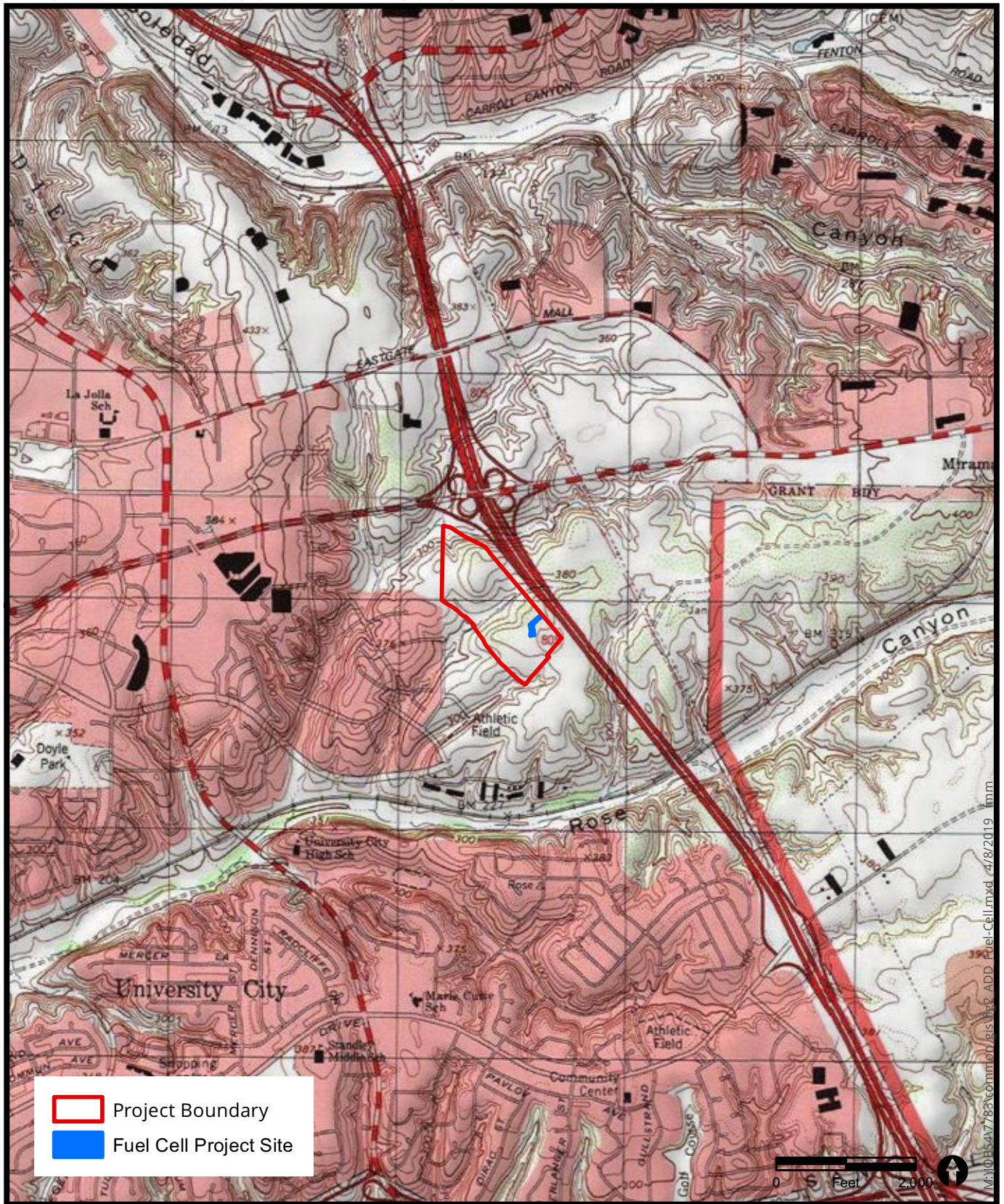


Regional Location

ARE-Illumina/Project No. 623196

City of San Diego – Development Services Department

FIGURE No. 1



Project Location on USGS Map

ARE-Illumina/Project No. 623196

City of San Diego – Development Services Department

**FIGURE
No. 2**

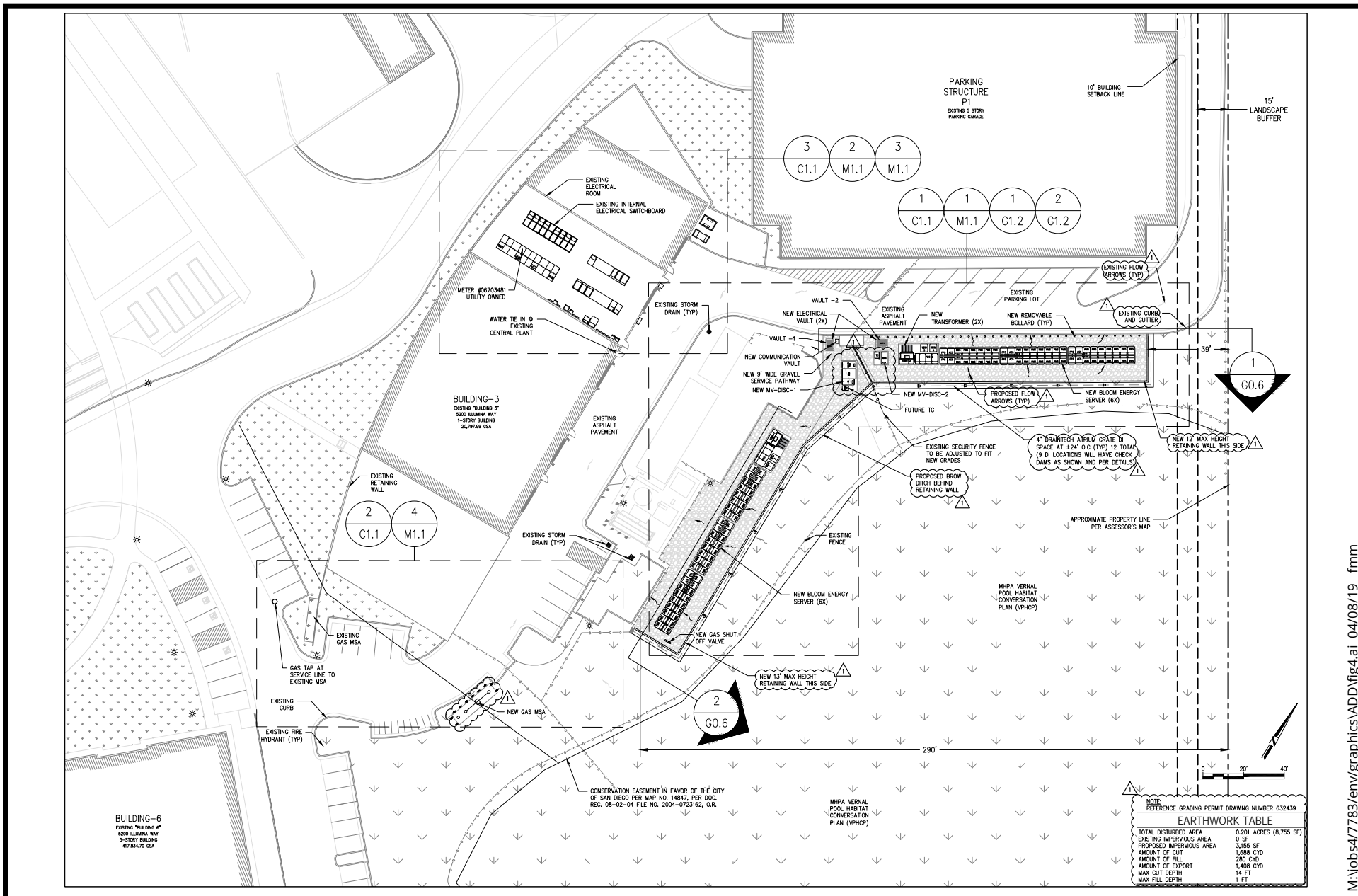


Project Location on Aerial Photograph

ARE-Illumina/Project No. 623196

City of San Diego – Development Services Department

**FIGURE
No. 3**



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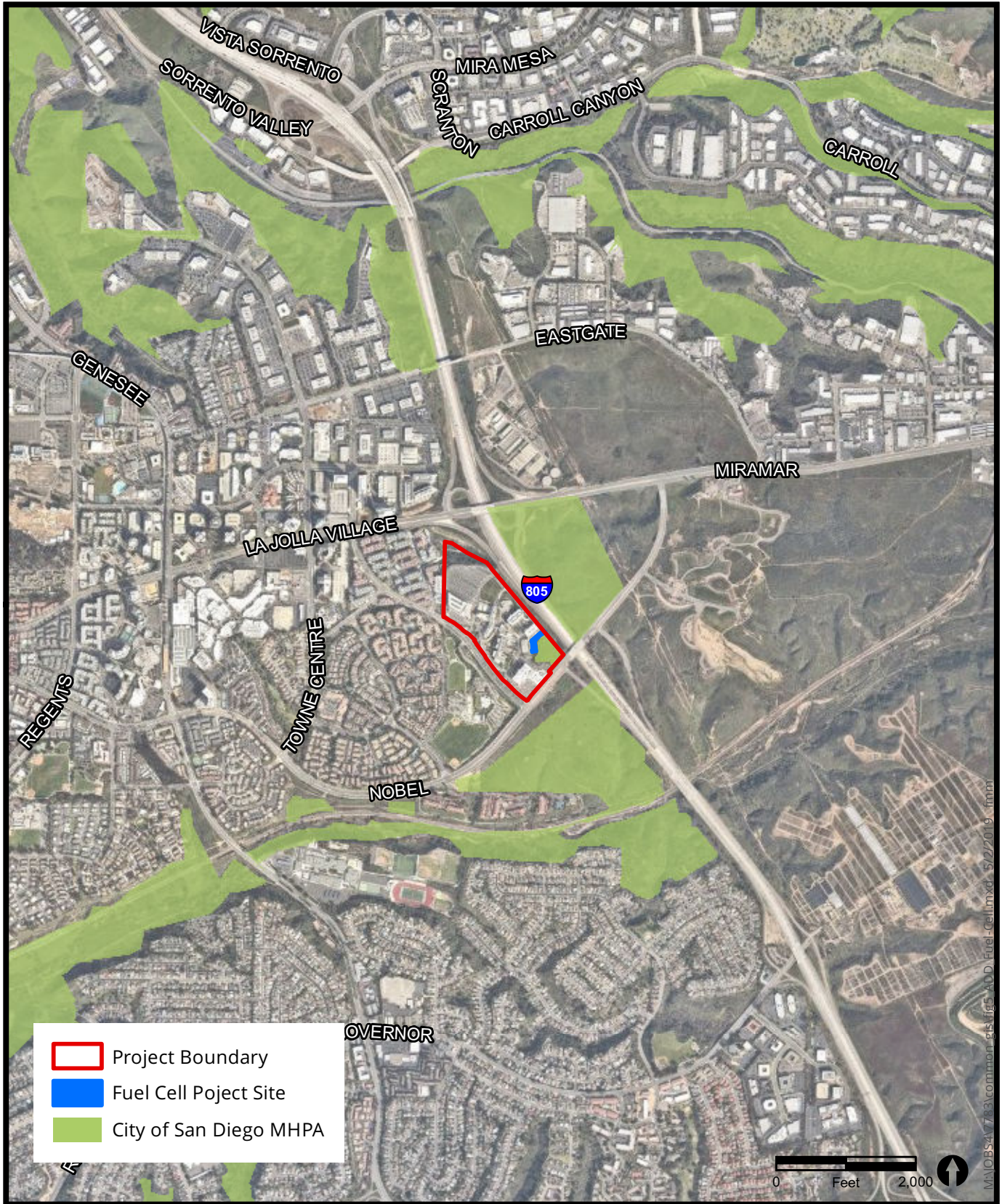
Overall Site Plan

ARE-Illumina/Project No. 623196

City of San Diego - Development Services Department

FIGURE

No. 4



Project in Relation to MHPA/Vernal Pool Preserve

ARE-Illumina/Project No. 623196

City of San Diego – Development Services Department

**FIGURE
No. 5**

