

**MITIGATION MONITORING OR
REPORTING PROGRAM**

**915 DEGUIGNE
RESIDENTIAL PROJECT**

CITY OF SUNNYVALE



November 2015

MITIGATION MONITORING OR REPORTING PROGRAM FOR THE 915 DEGUIGNE RESIDENTIAL PROJECT

1.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code Section 21081.6 mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.
- The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.
- A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- Prior to the close of the public review period for a draft environmental impact report (EIR), a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

1.2 MITIGATION MONITORING PROCEDURES

The mitigation monitoring program (MMP) has been prepared for the project in compliance with Public Resources Code Section 21081.6. It describes the requirements and procedures to be followed by the City of Sunnyvale (City) to ensure that all mitigation measures and conditions of approval adopted as part of the project will be carried out as described in the EIR.

As shown on the following pages, each required mitigation measure and condition of approval is listed and categorized by impact area. In addition, each of the following are identified for every required action:

- **Enforcement Agency:** The agency with the power to enforce the Mitigation Measure.
- **Monitoring Agency:** The agency to which reports involving feasibility, compliance, implementation and development are made.
- **Monitoring Phase:** The phase of the Proposed Project during which the Mitigation Measure shall be monitored.
- **Monitoring Frequency:** The frequency at which the Mitigation Measure shall be monitored.
- **Compliance Action:** The action of which the Enforcement or Monitoring Agency indicates that compliance with the required Mitigation Measure has been implemented.

The Project Applicant shall be obligated to provide documentation concerning implementation of the listed mitigation measures to the appropriate enforcement agency as provided for herein. The substance and timing of each certification report that is submitted to City Planning shall be at the discretion of City Planning. Generally, each report will be submitted to City Planning in a timely manner following completion/implementation of the applicable Mitigation Measure and shall include sufficient information to reasonably determine whether the intent of the measure has been satisfied. City Planning, in conjunction with the Project Applicant, shall assure that project construction occurs in accordance with the MMP. All departments listed below are within the City of Sunnyvale, unless otherwise noted. The entity responsible for the implementation of all mitigation measures shall be the Project Applicant unless otherwise noted.

After review and approval of the final MMP by the Lead Agency, minor changes and modifications to the MMP are permitted, but can only be made by the Project Applicant or its successor subject to the approval by the City. The City, in conjunction with any appropriate agencies or departments, will determine the adequacy of any proposed change or modification. The flexibility is necessary in light of the prototypical nature of the MMP, and the need to protect the environment with a workable program. No changes will be permitted unless the MMP continues to satisfy the requirements of CEQA, as determined by the Lead Agency.

The tables below list each of the Mitigation Measures and Conditions of Approval specified for the Proposed Project and the Maximum Build Out/Corner Mixed Use Scenario in the EIR and identifies the party or parties responsible for implementation and monitoring of each measure.

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.5 Noise						
Future residences on the project site located along Duane Avenue could be exposed to interior noise levels in excess of acceptable City standards.	<p>MM NOI 1-1: Consistent with Title 24 requirements, a design-level acoustical analysis shall be completed by the project developer for new residential uses where exterior noise levels would exceed 60 dBA Ldn. The analysis shall meet the following noise reduction requirements:</p> <ul style="list-style-type: none"> Interior average noise levels shall be reduced to 45 dBA Ldn or lower to meet the local standard. Building sound insulation requirements would need to include the provision of forced-air mechanical ventilation for all new units exposed to exterior noise levels greater than 60 dBA Ldn, so that windows could be kept closed at the occupant's discretion to control noise. Special building construction techniques (e.g., sound-rated windows and building facade treatments) may be required for new residential uses adjacent to East Duane Avenue. These treatments include, but are not limited to, sound rated windows and doors, sound rated wall constructions, and acoustical caulking. <p>The specific determination of what treatments would be necessary shall be completed on a unit-by-unit basis during the final building design. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City along with the building plans and approved prior to issuance of building permits.</p>	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of building permit	Once prior to issuance of building permit	Approval of plans/issuance of permits
Students at the adjacent school could be exposed to interior and exterior noise levels in excess of acceptable City standards during construction.	<p>MM NOI 2-1: Construct solid plywood fences (minimum eight feet in height) or erect noise control blanket barriers between the construction site and adjacent classrooms, school playgrounds, or sensitive interior spaces to reduce noise levels to the extent feasible.</p> <p>MM NOI 2-2: Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.</p> <p>MM NOI 2-3: Locate stationary noise generating equipment as far as possible from adjacent school receivers.</p>	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Construction	Periodic field inspections during construction	Field inspection sign-off

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	<p>MM NOI 2-4: Acoustically shield stationary equipment located near existing school receivers.</p> <p>MM NOI 2-5: Utilize "quiet" air compressors and other stationery noise sources where technology exists.</p> <p>MM NOI 2-6: The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses and the school so that construction activities can be scheduled to minimize noise disturbance.</p> <p>MM NOI 2-7: Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem.</p>					
4.9 Biological Resources						
Implementation of the proposed development project or any future development under the proposed General Plan Amendments could result in the loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment	<p>MM BIO 1-1: Construction shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors, in the San Francisco Bay area extends from February 1 through August 31.</p> <p>MM BIO 1-2: If it is not possible to schedule demolition and construction between September and January, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August).</p> <p>During this survey, the ornithologist will inspect all trees and other possible nesting habitats</p>	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of grading permits	Once prior to issuance of grading permit	Approval of plans/issuance of permits

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	<p>(e.g., grasslands and buildings) within and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with CDFW, will determine the extent of a construction-free buffer zone to be established around the nest, typically 250 feet, to ensure that nests of bird species protected by the MBTA or State Code will not be disturbed during project construction.</p> <p>MM BIO 1-3: A final report of nesting birds, including any protection measures, shall be submitted to the Director of Community Development prior to the issuance of grading permits.</p>					
4.10 Hazards and Hazardous Materials						
Even with implementation the proposed contamination remediation plan, redevelopment of the site with residential land uses could have a significant impact to future residents of the project site.	MM HAZ-1.1: The Water Board is the lead regulatory agency responsible for directing the cleanup; the US EPA is the support regulatory agency. The project applicant and subsequent property owners shall cooperate with the Water Board, US EPA, and the responsible parties for the on-going remediation/monitoring activities at the site. The site shall be developed in a manner that will allow access to the site for continued remediation and monitoring activities by the responsible parties.	RWQCB; U.S. EPA; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits
	MM HAZ-1.2: The project applicant or future site developer shall comply with the PPA. The PPA requires project developer to record a “new Covenant and Environmental Restriction on Property (Deed Restriction) in accordance with the requirements of California Civil Code Section 1471. The new deed restriction will prohibit extraction of groundwater for purposes other than monitoring and remediation and will require that activities that disturb the soil beneath the project site, such as grading, excavation or removal, shall be in accordance with the SMP.	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits
	MM HAZ-1.3: Groundwater monitoring wells, extraction wells, conveyance piping, and grout walls are located on-site. Construction measures shall be implemented to protect these features during construction. The Water Board shall be notified in writing of construction activities in these areas and, at a minimum, these areas shall be cordoned off using delineators and caution tape, or similar materials by the general contractor. Upon completion of construction activities, the monitoring and extraction wells and associated piping shall be inspected by a qualified	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit; construction	Once prior to issuance of grading permit; again upon the completion of	Approval of plans/issuance of permits and approval from RWQCB

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	environmental professional to determine if they have been damaged. If these on-site features require decommissioning, the project developer shall obtain the written approval by the Water Board; permits also may be required. The project developer's request to modify the groundwater remedy and monitoring infrastructure shall be submitted to the Water Board for their review and written approval. The Water Board's written approval shall be submitted to the City.				construction	
	MM HAZ-1.4: The project developer shall provide the Water Board's written approval of the Vapor Intrusion Investigation Work Plan and the VMP to the City.	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval from RWQCB
	MM HAZ-1.5: The spray-applied vapor barrier membrane shall include a warranty of 30 years. In addition, the project developer shall provide financial assurances of adequate funds for long-term operation and maintenance if required by the VMP.	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Construction; operation	Once prior to issuance of occupancy permit	Approval of occupancy permit; assurance of adequate funds if required by the VMP
	MM HAZ-1.6: Trichlorobenzene (TCB) isomers 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene were detected in a soil sample collected from a depth of approximately 8.5 feet within the PAD C excavation backfill at concentrations of 57 and 18 mg/kg, respectively. These concentrations exceed the residential RSL. The project developer shall obtain written Water Board approval to leave impacted (concentrations exceeding the lower of the then-current Water Board or US EPA residential screening levels) soil beneath residences. A deed restriction or land use covenant shall detail the location of these soils. This document shall include a map of these impacted soils; shall restrict future excavation in these areas; and shall require future excavation be conducted in these areas only upon written approval by the Water Board and in accordance with the SMP.	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval from RWQCB

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	<p>MM HAZ-1.7: During construction activities, undocumented fill in former UST pits located beneath residential structures and in the park shall be removed and replaced as engineered fill. If an organic vapor meter detects vapors greater than background levels, discrete soil samples shall be collected of stockpiled soil and analyzed for contaminants of potential concern at a frequency of one sample per every 250 cubic yards (cy) for the first 1,000 cy and one sample every 500 cy thereafter. If concentrations of contaminants of potential concern are detected exceeding the lower of the then current Water Board or US EPA residential screening levels, this soil shall be appropriately disposed off-site and confirmation samples shall be collected in the excavation (one per each sidewall and two at the base of the excavation, and in areas of stained or odorous soil). If contaminant concentrations in the confirmation samples exceed residential screening levels, written approval shall be obtained from the Water Board to leave impacted soil in-place. Alternatively, this soil shall be remediated to the lower of the then-current Water Board or US EPA residential screening levels. If this soil is left in-place, a deed restriction or land use covenant shall detail the location of these soils. This document shall include a map of these impacted soils; shall restrict future excavation in these areas; and shall require future excavation be conducted in these areas only upon written approval by the Water Board and in accordance with the SMP.</p>	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Construction; operation	Ongoing through construction phase; prior to issuance of occupancy permit	Soil removal or remediation plus recordation of deed restriction
	<p>MM HAZ-1.8: Upon demolition of the existing building on Parcel 2, the project developer shall perform a geophysical survey to locate buried metallic debris indicative of a UST or fuel transfer piping. If encountered, these structures shall be removed under permit from the local CUPA; confirmation sample shall be collected per the requirements of the CUPA. If confirmation samples exceed residential screening levels, this soil shall be remediated to the lower of the then-current Water Board or US EPA residential screening levels. Any remaining ground water monitoring wells shall be properly destroyed under permit and in accordance with Santa Clara Valley Water District's requirements.</p>	CUPA; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a demolition permit for the building on Parcel 2	Once prior to issuance of demolition permit	Issuance of demolition permit and CUPA permit, if required
	<p>MM HAZ-1.9: A Water Board approved Soil Management Plan (SMP) has been prepared by an Environmental Professional to establish management practices for handling contaminated soil, soil vapor, ground water or other materials. The project developer shall comply with the provisions of the SMP. The project developer's Environmental Professional shall assist in the implementation of the SMP and shall perform full-time observation services during demolition,</p>	RWQCB; City of Sunnyvale Department of Community	City of Sunnyvale Department of Community	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval from RWQCB

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	<p>excavation, grading and trenching activities. In addition to these requirements, the following protocols shall be established:</p> <ul style="list-style-type: none">• Prior to the start of any construction activity that involves below ground work (e.g., mass grading, foundation construction, excavating or utility trenching), information regarding Site risk management procedures (e.g., a copy of the SMP) shall be provided to the Contractors for their review, and each Contractor shall provide such information to its Subcontractors.• Protocols and procedures shall be prepared to protect the ground water remedy, including the slurry walls at the former Pad C excavation, which may appear similar to Site native soils.• During the removal of the buildings’ slabs, sumps and underground waste water piping, an Environmental Professional shall be present on-Site on a full time basis to observe soil conditions, to monitor vapors with a hand held meter, and to determine if additional soil sampling should be performed. Daily Field Reports (DFRs) shall be prepared by the Environmental Professional documenting: 1) the day’s activities; 2) vapor monitoring; 3) perimeter air monitoring; 4) soil and ground water sampling and associated analytical testing; 5) the source and quality of imported soil; 6) the installation of the vapor barrier system; and 7) variances with the SMP. Photographs shall be taken by the Environmental Professional to help document information entered in the DFR. When a photograph is taken, the following information shall be written in the daily field report: 1) Time, date, location, and, if appropriate, weather conditions; 2) Description of the subject photographed; and 3) Name of person taking the photograph.• Perimeter air monitoring shall be conducted at the site during any activity that significantly disturbs site soil (e.g., mass grading, foundation construction, excavating or utility trenching) to document the effectiveness of dust control measures. Real time monitoring of total dust (<10 µm diameter) shall be conducted daily throughout the duration of the project during activities that may significantly disturb impacted soil. The monitoring shall be performed using three DataRAM PDR-1000 particulate monitors, or equivalent. These meters log the detected airborne dust concentrations. The particulate meters shall be monitored by the Environmental Professional to evaluate if excessive dust is migrating off-site. On a daily basis, or more frequently if	Development	Development			

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	<p>warranted by Site conditions, the differences between the average upwind dust concentration and the average downwind concentration shall be compared to the ambient air quality standard of 150 µg/m³ (8-hour average) for respirable dust. If this standard is exceeded, increased dust control measures shall be implemented.</p> <ul style="list-style-type: none">• If excavation dewatering is required, protocols shall be prepared to evaluate water quality and discharge/disposal alternatives; the pumped water shall not be used for on-site dust control or any other on-Site use. If long-term dewatering is required, the means and methods to extract, treat and dispose ground water also shall be presented to the Water Board for their written approval; this written approval shall be submitted to the City.• Decontamination procedures shall be established and implemented by the Contractor to reduce the potential for construction equipment and vehicles to release contaminated soil onto public roadways or other off-Site transfer. During any construction activity that involves below ground work (e.g., mass grading, foundation construction, excavating or utility trenching), daily street sweeping of the public roadway entrances/streets shall be performed.• Procedures shall be developed to evaluate and document the quality of any soil imported to the site. Soil containing chemicals exceeding residential (unrestricted use) screening levels or typical background concentrations of metals shall not be accepted. Adequate documentation shall be required so it can be verified that the fill source is appropriate for the site by the Environmental Professional. The documentation shall include detailed information on previous land use of the fill source, any environmental site assessments performed and the findings, and the results of any analytical testing performed. If no documentation is available or the documentation is inadequate, or if no analytical testing has been performed, samples of the potential fill material shall be collected and analyzed per the protocols established by DTSC. The analyses performed shall be based on the fill source and knowledge of the previous land use. The sample frequency for potential fill material shall be in accordance with that outlined in the technical document titled, “Information Advisory on Clean Imported Fill Material” (DTSC, October 2001).					

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	<ul style="list-style-type: none"> Appropriate measures shall be implemented to reduce soil vapor and ground water migration through trench backfill and utility conduits. Such measures shall include placement of low-permeability backfill “plugs” at specified intervals on-site and at all locations where the utility trenches extend off-site. In addition, utility conduits that are placed below ground water shall be installed with water-tight fittings to reduce the potential for ground water to migrate into the conduits. Because the site is known to have pollutants with the potential for mobilization, the Civil Engineer shall design the bottom and sides of the vegetated swales and water features (if incorporated into the building design) to be lined with a minimum 10-mil heavy duty plastic to help prevent Site infiltration. 					
	MM HAZ-1.10: Upon completion of construction activities, the Environmental Professional shall prepare a report documenting compliance with the SMP; it shall contain a summary of: 1) vapor monitoring; 2) perimeter air monitoring; 3) soil and ground water sampling and associated analytical testing; 4) the sources, quantity and quality of imported soils; 5) the installation of the vapor barrier system; and 6) variances to the SMP. This report shall be submitted to the Water Board and US EPA. Written approval of the completion report by the Water Board shall be provided to the City.	RWQCB; U.S. EPA; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Construction	Once upon completion of construction	Approval from RWQCB and EPA
	MM HAZ-1.11: Some components encountered as part of the building demolition waste stream may contain hazardous materials. Universal wastes, lubrication fluids and CFCs and HCFC’s shall be removed before structural demolition begins. Materials that may result in possible risk to human health and the environment when improperly managed include lamps, thermostats, and light switches containing mercury; batteries from exit signs, emergency lights, and smoke alarms; lighting ballasts which contain PCBs; and lead pipes and roof vent flashings. Demolition waste such as fluorescent lamps, PCB ballasts, lead acid batteries, mercury thermostats, and lead flashings have special case-by-case requirements for generation, storage, transportation, and disposal. Before disposing of any demolition waste, the project developer and the demolition contractor shall determine if the waste is hazardous and shall ensure proper disposal of waste materials.	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Construction	Prior to issuance of occupancy permit	Approval of occupancy permit

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	MM HAZ-1.12: Significant quantities of asphalt concrete (AC) grindings, aggregate base (AB), and Portland Cement Concrete (PCC) will be generated during demolition activities. AC/AB grindings shall not be reused beneath building areas.	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Construction	Prior to issuance of occupancy permit	Issuance of occupancy permit
	MM HAZ-1.13: The HASP will include: (i) provisions for vapor sampling in trenches to ensure a safe atmosphere for workers, and (ii) identification of conditions where a respirator may be required to protect against VOCs.	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits
	MM HAZ-1.14: The SMP includes a map that identifies the areas where VOCs have been observed in soil and/or groundwater. In those areas, VOC monitoring will be required during excavation and trenching. The HASP will include action levels for VOCs that are detected by field instruments (a photoionization detector or PID) during work.	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits
4.11 Cultural Resources						
Future development on the project site could impact as yet unrecorded subsurface cultural resources.	<p>MM CUL 1-1: Prior to the initiation of any ground disturbing activities or issuance of grading permits for the southwest corner of Parcel 1, a qualified professional archaeologist shall undertake a presence/absence testing program to identify the horizontal and vertical extent of any potential buried archaeological deposits associated with CA-SC1-9 or other as yet unknown cultural resources at this location within the project site. The boundaries of the area to be tested within the southwest corner of Parcel 1 shall be determined by the archaeologist based on available records for site CA-SC1-9.</p> <p>Once the testing program is complete, the results shall be presented in a <i>Presence/Absence Testing Report</i> commensurate with the findings and submitted to the City for review. Any recommendations for treatment of a significant resource shall be presented in the report.</p> <p>MM CUL 1-2: Prior to the initiation of any construction that has the potential for ground-</p>	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Construction	Through grading and excavation	If unanticipated discoveries are found, submittal of a report and mitigation plan(s) by a qualified archeologist

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	<p>disturbing activities within the project site, the project proponent shall inform all construction personnel of the potential for exposing subsurface cultural resources and to recognize possible buried cultural resources. Personnel shall be informed of the procedures that will be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains and their treatment.</p> <p>MM CUL 1-3: Archaeological monitoring on a full-time basis by a Professional Archaeologist shall be undertaken during any subsurface construction that disturbs native sediments within and within a radius of 100 feet to CA-SCI-9. The archaeologist shall maintain a log of his/her observations and complete a <i>Monitoring Closure Report</i> at the completion of monitoring detailing any observations.</p> <p>MM CUL 1-4: Archaeological monitoring on a less-than-full time basis with the frequency and duration to be determined by a Professional Archaeologist shall be undertaken during any subsurface construction that disturbs native sediments within the East Sunnyvale ITR parcel. The archaeologist shall maintain a log of his/her observations and complete a <i>Monitoring Closure Report</i> at the completion of monitoring detailing any observations.</p> <p>MM CUL 1-5: Excavation contracts for development shall contain provisions for stop-work in the vicinity of an archaeological find in the event of the exposure of significant cultural resources during subsurface construction. In addition, the contract documents shall recognize the need to implement any mitigation conditions required by permitting and regulatory agencies. In general, the appropriate construction conditions should be included within the <i>General Conditions</i> section of any contract that has the potential for ground disturbing operations.</p> <p>MM CUL 1-6: If any unanticipated prehistoric or significant historic era cultural materials including Native American burials are exposed during construction grading and/or excavation, operations should stop within a minimum of 50 feet of the find to avoid altering the cultural materials and their context and a qualified Professional Archaeologist retained for identification, evaluation and further recommendations. The Community Development Director of the City of Sunnyvale shall be notified of the discovery. Construction work shall not begin again within the</p>					

Proposed Project – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
	<p>find area until the archaeologist has been allowed to examine the cultural materials, assess their significance, and offer proposals for any additional exploratory measures deemed necessary for the further evaluation of, and/or mitigation of adverse impacts to, any potential historical resources or unique archaeological resources that have been exposed. If the discovery is determined to be a unique archaeological or historical resource under the criteria of the <i>California Register of Historical Resources</i> after review and evaluation by a Professional Archaeologist, and if avoidance of the resource is not possible, the Professional Archaeologist shall develop plans for treatment of the find(s) and mitigation of impacts acceptable to the City of Sunnyvale. The treatment plan shall be designed to result in the extraction of sufficient non-redundant archaeological data to address important regional research considerations. The project proponent shall make every effort to insure that the treatment program is completed. The work shall be performed by the archaeologist, and shall result in a detailed technical report that shall be filed with the California Historical Resources Information System, Northwest Information Center. Construction in the immediate vicinity of the find shall not recommence until treatment has been completed.</p> <p>If human remains are discovered, they shall be handled in accordance with State law including immediate notification of the Santa Clara County Medical Examiner.</p>					

Source: City of Sunnyvale, 915 DeGuigne Residential Project Final Environmental Impact Report, October 2015.

All mitigation measures identified for the proposed project would be required under the Maximum Build Out/Corner Mixed Use Development Scenario. In addition to the previously listed mitigation measures, the Maximum Build Out/Corner Mixed Use Development Scenario would be required to implement the following mitigation measures.

Maximum Build Out/Corner Mixed Use Development Scenario – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.3 Air Quality						
Construction of the maximum build out/corner mixed-use development scenario could have a significant, temporary impact on nearby sensitive receptors.	<p>MM AIR 1-1: A Health Risk Analysis shall be completed for the maximum build out/corner mixed-use development scenario prior to issuance of any demolition or grading permits for the project. The analysis shall be based on project specific construction data. If emissions are calculated to be above the BAAQMD thresholds, mitigation measures will be required to reduce emissions below BAAQMD thresholds during all phases of construction. Measures may include, but are not limited to:</p> <ul style="list-style-type: none"> • Use of newer or retrofitted construction equipment that has lower emissions rates than standard equipment; • Use of alternative fuel equipment; • Modification of construction techniques to avoid use of diesel-powered equipment; and • Phasing of construction activities. 	<p>City of Sunnyvale Department of Community Development</p> <p>BAAQMD</p>	<p>City of Sunnyvale Department of Community Development</p> <p>BAAQMD</p>	Construction	Through grading, excavation, and construction	Issuance of demolition and grading permits
4.8 Hydrology and Water Quality						
If the final site plan of the maximum build out/corner mixed-use development scenario has a total impervious surface area greater than the existing conditions, the project could have a significant impact on the existing storm drainage system.	The project developer shall design the project to reduce directly connected impervious areas to ensure the flood design storm flows are maintained at or under the existing project flows.	City of Sunnyvale Departments of Community Development and Public Works	City of Sunnyvale Departments of Community Development and Public Works	Final site design and construction.	Once after project construction is complete	Issuance of Occupancy Permits

Maximum Build Out/Corner Mixed Use Development Scenario – Mitigation Measures						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.13 Utilities and Service Systems						
If the final site plan of the maximum build out/corner mixed-use development project has a total impervious surface area greater than the existing conditions, the project could have a significant impact on the capacity of the existing storm drainage system.	The project developer shall design the project to reduce directly connected impervious areas to ensure the flood design storm flows are maintained at or under the existing project flows.	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Final site design and construction.	Once after project construction is complete	Issuance of Occupancy Permits

Source: City of Sunnyvale, 915 DeGuigne Residential Project Final Environmental Impact Report, October 2015.

All Conditions of Approval identified below apply to both the proposed project and the Maximum Build Out/Corner Mixed Use Development Scenario.

Conditions of Project Approval					
Conditions	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.2 Transportation					
The applicant will be required to provide a construction truck route plan to the Director of Public Works for review and approval prior to the issuance of any permits for the project. This plan will establish the designated truck routes and utilizing the most direct access to the freeways and avoiding residential streets.	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits
<p>The project will be required to implement the following improvement:</p> <ul style="list-style-type: none"> The project shall increase the green time for the northbound left turn movement or widen the bridge structure to increase the left turn capacity. 	City of Sunnyvale Department of Public Works; CALTRANS	City of Sunnyvale Department of Community Development	Operation	Once, prior to issuance of certificate of occupancy	Issuance of certificate of occupancy
4.3 Air Quality					
<p>The project will be required to implement the following BAAQMD dust control measures during all phases of construction:</p> <ol style="list-style-type: none"> All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. All vehicle speeds on unpaved roads shall be limited to 15 mph. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible and feasible. Building pads shall be laid as soon as possible and feasible, as well, after grading unless seeding or soil binders are used. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 	BAAQMD; City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Construction	Periodic field inspections during construction	Field inspection sign-off

Conditions	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
<p>7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</p> <p>8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.</p>					
4.6 Visual and Aesthetics					
All outside lighting will be directed away from nearby residences so as not to cause significant glare or light spill over onto adjacent properties. Lighting at the proposed park on Parcel 2 would be required to be comparable to the lighting at Swegles Park and consistent with City design guidelines (AASHTO Roadway Lighting Design and IESNA RP-8-05 Standard) for public parks.	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Operation	Once, prior to issuance of certificate of occupancy	Issuance of certificate of occupancy
4.7 Hydrology and Water Quality					
<p>The project will be required to implement the following measures, consistent with the NPDES Municipal Permit and the Sunnyvale Municipal Code, for avoiding and reducing construction-related erosion impacts.</p> <ul style="list-style-type: none"> All construction sites shall implement effective erosion control, run-on and runoff control, sediment control, active treatment systems (as appropriate), good site management, and non-stormwater management through all phases of construction (including, but not limited to, site grading, building and finishing of lots) until the site is fully stabilized by landscaping or the installation of permanent erosion control measures. Grading shall be designed to minimize soil erosion, runoff and water waste. The grading shall avoid soil compaction in planted landscaped areas. Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days. Protect storm drain inlets, gutters, ditches, and drainage courses with appropriate best management practices (BMPs), such as gravel bags, fiber rolls, and berms 	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Construction	Periodic field inspection	Field inspection sign-off

Conditions	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.8 Hydrology and Water Quality					
<p>The project will be required to implement the following measures, based on BMPs recognized by the RWQCB, to reduce construction-related water quality impacts.</p> <ul style="list-style-type: none"> • Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains. • Earthmoving or other dust-producing activities shall be suspended during periods of high winds. • All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary. • Stockpiles of soil or other materials that can be blown by the wind shall be watered or covered. • All trucks hauling soil, sand, and other loose materials shall be covered or maintain at least two feet of freeboard. • All paved access roads, parking areas, staging areas and residential streets adjacent to the construction site shall be swept daily (with water sweepers). • Vegetation in disturbed areas shall be replanted as quickly as possible. • All unpaved entrances to the site shall be filled with rock to knock mud from truck tires prior to entering City streets. A tire wash system may also be employed at the request of the City. 	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Construction	Periodic field inspection	Field inspection sign-off
<p>The following measures, based on the RWQCB's Best Management Practices and the City requirements, will be implemented to ensure compliance with NPDES permit requirements to reduce post-construction water quality impacts.</p> <ul style="list-style-type: none"> • When the construction phase is complete, a Notice of Termination (NOT) for the General Permit for Construction shall be filed with the RWQCB and the City of Sunnyvale by the project developer. The NOT shall document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of, and a post-construction stormwater management plan is in place for the project site. 	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Operation	Onset of project operations	Issuance of Certificate of Occupancy; Field inspection sign-off

Conditions	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
<ul style="list-style-type: none"> All post-construction Treatment Control Measures (TCMs) shall be installed, operated, and maintained by qualified personnel under the direction of the project sites home owners association (HOA). On-site inlets shall be cleaned out at a minimum of once per year, prior to the wet season. The HOA shall keep maintenance and inspection schedules and records to ensure the TCMs continue to operate effectively for the life of the project. Copies of the schedules and records shall be provided to the City upon request and must be made available for inspection on-site at all times. 					
4.9 Biological Resources					
The project applicant will be required to replant replacement trees on-site to mitigate for the loss of trees. The number and species of replacement trees required will be determined by the Director of Community Development. If it is determined by the Director of Community Development that it is not feasible to plant all required replacement trees on-site, the applicant will be required to pay for the planting of new trees in parks or other public areas of the City.	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of grading permits	Once prior to issuance of grading permit	Approval of plans/issuance of permits
<p>Consistent with the mitigation measures in the <i>East Sunnyvale ITR Project Final EIR</i>, the project applicant will be required to prepare and submit a tree protection plan prior to issuance of demolition permits that demonstrates the tree protection measures that will be in place for the whole of the construction period. Pursuant to Section 19.94.120 of the Municipal Code, the tree protection plan will include the following measures:</p> <ol style="list-style-type: none"> Protective fencing shall be installed no closer to the trunk than the dripline and far enough from the trunk to protect the integrity of the tree. The fence shall be a minimum of four feet in height and shall be set securely in place. The fence shall be of a sturdy but open material (i.e., chain link) to allow visibility to the trunk for inspections and safety. The existing grade level around a tree shall normally be maintained out to the dripline of the tree. Alternate grade levels, as described in the tree protection plan, may be approved by the Director of Community Development. Drain wells shall be installed whenever impervious surfaces will be placed over the root system of a tree (the root system generally extends to the outermost edges of the branches). Pruning that is necessary to accommodate a project feature, such as a building, road or walkway shall be reviewed and approved by the Department of Community Development and the Department of Public Works. 	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of grading permits; implementation of tree protection plan during construction	Once prior to issuance of grading permit; periodic inspection during construction	Approval of plans/issuance of permits; field inspection sign-off

Conditions	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
<p>5. New landscaping installed within the dripline of an existing tree shall be designed to reproduce a similar environment to that which existed prior to construction. (Ord. 2623-99 § 1; prior zoning code § 19.81.130).</p> <p>If the off-site trees become damaged during construction activities, the trees would be replaced in accordance with the Director of Community Development's requirements.</p>					
4.10 Hazardous Materials					
<p>The project is required to conform to the following regulatory programs to reduce impacts due to the presence of ACMs and/or lead-based paint:</p> <ul style="list-style-type: none"> In conformance with State and local laws, a visual inspection/pre-demolition survey, and possible sampling shall be conducted prior to the demolition of on-site buildings to determine the presence of asbestos-containing materials and/or lead-based paint. During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code Regulations 1532.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings shall be disposed of at landfills that meet acceptance criteria for the waste being disposed. All potentially friable ACMs shall be removed in accordance with NESHAP guidelines prior to building demolition. All demolition activities will be undertaken in accordance with Cal/OSHA standards contained in Title 8 of CCR, Section 1529, to protect workers from asbestos exposure. A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above. Materials containing more than one percent asbestos are also subject to BAAQMD regulations. Removal of materials containing more than one percent asbestos shall be completed in accordance with BAAQMD requirements and notifications. 	<p>City of Sunnyvale Department of Community Development</p> <p>Cal/OSHA</p>	<p>City of Sunnyvale Department of Community Development</p>	<p>During demolition</p>	<p>Periodically during demolition as mandated by Cal/OSHA</p>	<p>Issuance of grading permits</p>

Conditions	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
The internal roadway layout of the site shall be required to meet the City’s emergency vehicle access requirements.	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Final Site Design	On-going pursuant to inspection schedule	Issuance of Certificate of Occupancy; Field inspection sign-off
4.13 Utilities					
<p>The project shall include a waste management plan to comply with the City’s Waste Management Plan, includes recommendations for waste management during construction and operation of the project. The project’s waste management plan will be submitted to the City for approval prior to issuance of occupancy permits and will include the following measures:</p> <ul style="list-style-type: none">• Describe the volume of waste to be generated during demolition and construction;• Identify the weight of materials to be reused, recycled, or diverted from the landfill from the generated construction waste; and• Identify the waste disposal location for the remaining non-recycled construction waste/materials.	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Operation	Once, prior to issuance of certificate of occupancy	Issuance of certificate of occupancy

Source: City of Sunnyvale, 915 DeGuigne Residential Project Final Environmental Impact Report, October 2015.

Maximum Build Out/Corner Mixed Use Development Scenario – Mitigation Measures for Cumulative Impacts						
Impact	Mitigation Measures	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
Transportation						
Under cumulative conditions, implementation of the maximum build out project would result in result in a degradation of LOS at the Fair Oaks Avenue/Duane Avenue intersection, trigger a signal warrant at the Wolfe Road/Maude Avenue intersection, and result in a degradation of LOS at the Lawrence Expressway/Duane Avenue intersection.	<p>MM CUM-2.1: If the maximum build out/corner mixed use development scenario is implemented, the project developer will be required to install traffic signals at the Wolfe Road/Maude Avenue intersections. Signalization of the intersection would be required prior to the issuance of occupancy permits for the residences.</p> <p>MM CUM-2.2: If the maximum build out/corner mixed use development scenario is implemented, the project developer will be required to restripe the eastbound approach to be three left-turn lanes, one through lane, and one right turn lane at the Lawrence Expressway/Duane Avenue intersection. This mitigation measure could not be implemented without the approval of Santa Clara County._Restriping of the intersection would be required prior to the issuance of occupancy permits for the residences.</p>	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Community Development	Operation	Once, prior to issuance of certificate of occupancy	Issuance of certificate of occupancy

Source: City of Sunnyvale, 915 DeGuigne Residential Project Final Environmental Impact Report, October 2015.

Project Design Features – Proposed Project					
Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.3 Air Quality					
Project Design Feature AQ-1: The project proposes construction protocols that will include BAAQMD CEQA Air Quality Guidelines “Best Management Practices,” (BMPs), including proper selection of construction equipment, techniques and scheduling that will be applied to construction activities that could generate fugitive dust and exhaust emissions that could affect nearby land uses.	BAAQMD; City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Construction	Periodic field inspections during construction	Field inspection sign-off
Project Design Feature AQ-2: The project will be constructed using equipment that meets EPA Tier 3 standards.	BAAQMD; City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Construction	Periodic field inspections during construction	Field inspection sign-off
4.4 Greenhouse Gas Emissions					
Project Design Feature GHG-1: The project proposes the following green building measures: <ul style="list-style-type: none"> • Drought tolerant landscaping • Use of recycled water for irrigation • Design and shielding of outdoor lighting to reduce light pollution • Energy efficient water heaters • Low-flow fixtures • Energy-star rated appliances 	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of building permits	Once prior to issuance of building permit.	Approval of plans/issuance of permits
Project Design Feature GHG-2: To enhance bicycle and pedestrian access, a 10-foot wide multi-use bicycle and pedestrian path will bisect Parcel 1 of the project site, and either a 10-foot wide multi-use bicycle and pedestrian path, or a six-foot dedicated pedestrian sidewalk and a six-foot dedicated bicycle lane, will surround the perimeter of the entire project site (as noted in Section 2.1.1 of the EIR).	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of building permits	Once prior to issuance of building permit.	Approval of plans/issuance of permits

Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.4 Greenhouse Gas Emissions					
Project Design Feature GHG-3: The proposed housing will utilize natural gas and only include natural gas fueled fireplaces	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of building permits	Once prior to issuance of building permit.	Approval of plans/issuance of permits
4.7 Geology and Soils					
Project Design Feature GEO-1: Title 16 of the Sunnyvale Municipal Code (Buildings and Construction) includes the 2013 California Building, Plumbing, Mechanical, Electrical, Existing Building, Historical Building, and Green Building Codes. Requirements for building safety and earthquake hazard reduction are also addressed in Chapter 17.40 (Dangerous Buildings) and Chapter 17.10 (Geologic Hazards Regulations) of the Municipal Code. Requirements for grading, excavation, and erosion control are included in Chapter 17.04 (Building Code, Part 6 Excavation and Grading). In accordance with the Sunnyvale Municipal Code, the Director of Public Works must issue a Certificate of Geologic Hazard Clearance prior to the issuance of grading and building permits within defined geologic hazard zones.	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Prior to issuance of a grading permit and building permits	Twice: once prior to issuance of grading permit and once prior to issuance of building permits.	Approval of plans/issuance of permits
4.8 Hydrology and Water Quality					
Project Design Feature WQ-1: The San Francisco Bay RWQCB has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008) (MRP). In an effort to standardize stormwater management requirements throughout the region, this permit replaces the formerly separate countywide municipal stormwater permits with a regional permit for 77 Bay Area municipalities, including the City of Sunnyvale. Under provisions of the MRP, all redevelopment projects that disturb more than 10,000 square feet are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. Amendments to the MRP require all of the post-construction runoff to be treated by using Low Impact Development (LID) treatment controls, such as biotreatment facilities. The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) assists co-permittees, such as the City of Sunnyvale, to implement the provisions of the Municipal NPDES Permit. Conformance with the MRP requirements is illustrated in the Preliminary Stormwater Management Plan and will be finalized in the final Stormwater Management Plan at the Development Permit stage of the project. Plans will be certified by engineers to ensure incorporation of appropriate and effective site design, source control, and stormwater treatment using Low Impact Development (LID) features to prevent discharge of pollutants, reduce impervious surfaces, retain a percentage	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a building permit	Once prior to issuance of building permit	Approval of plans/issuance of permits

Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.8 Hydrology and Water Quality					
<p>of runoff on-site for percolation, and incorporate treatment control measures to remove pollutants from runoff entering the storm drainage system. In order to meet the City's and the NPDES requirements, the proposed project includes the following design features to reduce runoff pollutant loads:</p> <ul style="list-style-type: none"> The pathways, driveways, surface parking lots and rooftop runoff would drain into bioretention areas located around the buildings, within landscaped areas, and along the borders of the site. <p>The proposed treatment facilities must be shown to have sufficient capacity to treat the stormwater runoff entering the storm drainage system. In addition, the project would be required to maintain all post-construction treatment control measures, as outlined below, throughout the life of the project.</p>					
<p>Project Design Feature WQ-2: The SWRCB has implemented a NPDES General Construction Permit for the State of California. For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction.</p>	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits
<p>Project Design Feature WQ-3: The project site currently has soil contamination and proposes to leave some contamination on-site and cap it, as discussed in the project description and in Section 4.10.3.2 of the EIR. All contaminated soils left on-site will be placed under roadways or within concrete basements that will be capped. None of the contaminated soil will be located in proximity to the stormwater treatment areas so no cross contamination will occur as stormwater flows through the treatment areas or percolates through the soil.</p>	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits
<p>Project Design Feature WQ-4: As a condition of project approval, the project will be required to implement the following measures, based on BMPs recognized by the RWQCB, to reduce construction-related water quality impacts.</p> <ul style="list-style-type: none"> Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains. Earthmoving or other dust-producing activities shall be suspended during periods of high winds. All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary. Stockpiles of soil or other materials that can be blown by the wind shall be watered or covered. All trucks hauling soil, sand, and other loose materials shall be covered or maintain at least two feet of freeboard. 	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Construction	Periodic field inspection	Field inspection sign-off

Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.8 Hydrology and Water Quality					
<ul style="list-style-type: none"> All paved access roads, parking areas, staging areas and residential streets adjacent to the construction site shall be swept daily (with water sweepers). Vegetation in disturbed areas shall be replanted as quickly as possible. All unpaved entrances to the site shall be filled with rock to knock mud from truck tires prior to entering City streets. A tire wash system may also be employed at the request of the City. <p>All measures will be implemented prior to the start of earthmoving activities on-site and will continue until construction is complete.</p>					
<p>Project Design Feature WQ-5: Construction of the project would involve excavation that could temporarily interfere with groundwater flow in the shallow aquifer. The project proposes to implement the following project-specific measures from the geotechnical report (refer to <i>Section 4.7, Geology and Soils</i>, and Appendix D of the EIR) for encounters with the underground structures and groundwater:</p> <ul style="list-style-type: none"> The floor slab shall be cored cleanly through with numerous holes roughly four inches in diameter. The holes should be utilized to assess the condition of the subgrade beneath the floor slab as well as provide a drainage pathway for equalization of groundwater levels following demolition and backfill. The basement retaining walls shall be removed to a depth of at least five feet below existing grades, or at least two feet below the depth of deepest proposed foundation or utility, whichever is deeper. If the lower portion of the walls are left in place, then demolition of the walls above the target cut-off elevation should be performed without damaging or moving the portions of the walls that will be left in place. After the upper portion of the walls are removed, an evaluation of wall backfill material shall be performed. Localized subexcavation of existing wall backfill behind the portions of the basement walls left in place will be necessary if the material is yielding and not deemed a suitable engineered fill material. Provided that the geotechnical evaluation of the subgrade and conditions encountered during demolition confirm the structure is suitable to be abandoned in place, the excavation may be backfilled with engineered fill. If portions of existing structures are abandoned in place, the location of proposed lots shall be situated such that future structures do not straddle demolition excavations and native soil areas. Disclosure to future homeowners of information regarding the presence of former basement walls, floor slabs, and footing foundations shall be required. 	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Construction	Periodic field inspection	Field inspection sign-off

Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.8 Hydrology and Water Quality					
All subsurface construction activities will implement the identified project-specific measures and shall adhere to all applicable laws and regulations, including the 2013 California Building Code.					
<p>Project Design Feature WQ-6: The following measures, based on the RWQCB's Best Management Practices and the City requirements, will be implemented as a condition of project approval to ensure compliance with NPDES permit requirements to reduce post-construction water quality impacts.</p> <ul style="list-style-type: none"> When the construction phase is complete, a Notice of Termination (NOT) for the General Permit for Construction shall be filed with the RWQCB and the City of Sunnyvale by the project developer. The NOT shall document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of, and a post-construction stormwater management plan is in place for the project site. All post-construction Treatment Control Measures (TCMs) shall be installed, operated, and maintained by qualified personnel under the direction of the project sites home owners association (HOA). On-site inlets shall be cleaned out at a minimum of once per year, prior to the wet season. The HOA shall keep maintenance and inspection schedules and records to ensure the TCMs continue to operate effectively for the life of the project. Copies of the schedules and records shall be provided to the City upon request and must be made available for inspection on-site at all times. 	City of Sunnyvale Department of Public Works	City of Sunnyvale Department of Public Works	Operation	Onset of project operations	Issuance of Certificate of Occupancy; Field inspection sign-off
4.9 Biological Resources					
<p>Project Design Feature BIO-1: Pursuant to Municipal Code Section 19.94, the project applicant will be required to obtain tree removal permits for all protected trees. The minimum tree replacement size for protected trees is a 24-inch box size tree. The Director of Community Development has the authority to require larger or smaller replacement trees on a case by case basis. As a condition of approval, the project applicant will be required to replant replacement trees on-site to mitigate for the loss of trees. The number and species of replacement trees required will be determined by the Director of Community Development. If it is determined by the Director of Community Development that it is not feasible to plant all required replacement trees on-site, the applicant will be required to pay for the planting of new trees in parks or other public areas of the City.</p>	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of grading permits	Once prior to issuance of grading permit	Approval of plans/issuance of permits
Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action

Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.9 Biological Resources					
<p>Project Design Feature BIO-2: There are trees on adjacent properties along the western and southern boundaries of the project site. While these trees are not on the project site, the root systems and/or canopies of these trees could be impacted by construction activities. As a condition of approval, consistent with the mitigation measures in the <i>East Sunnyvale ITR Project Final EIR</i>, the project applicant will be required to prepare and submit a tree protection plan prior to issuance of demolition permits that demonstrates the tree protection measures that will be in place for the whole of the construction period. Pursuant to Section 19.94.120 of the Municipal Code, the tree protection plan will include the following measures:</p> <ol style="list-style-type: none"> Protective fencing shall be installed no closer to the trunk than the dripline and far enough from the trunk to protect the integrity of the tree. The fence shall be a minimum of four feet in height and shall be set securely in place. The fence shall be of a sturdy but open material (i.e., chain link) to allow visibility to the trunk for inspections and safety. The existing grade level around a tree shall normally be maintained out to the dripline of the tree. Alternate grade levels, as described in the tree protection plan, may be approved by the Director of Community Development. Drain wells shall be installed whenever impervious surfaces will be placed over the root system of a tree (the root system generally extends to the outermost edges of the branches). Pruning that is necessary to accommodate a project feature, such as a building, road or walkway shall be reviewed and approved by the Department of Community Development and the Department of Public Works. New landscaping installed within the dripline of an existing tree shall be designed to reproduce a similar environment to that which existed prior to construction. (Ord. 2623-99 § 1; prior zoning code § 19.81.130). <p>If the off-site trees become damaged during construction activities, the trees would be replaced in accordance with the Director of Community Development's requirements.</p>	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of grading permits; implementation of tree protection plan during construction	Once prior to issuance of grading permit; periodic inspection during construction	Approval of plans/issuance of permits; field inspection sign-off
4.10 Hazards and Hazardous Materials					
<p>Project Design Feature HAZ-1: Pesticide Mitigation Plan. The project proponent will prepare a pesticide mitigation plan (PMP) for approval by the Regional Water Quality Control Board (RWQCB) that will specify mitigation measures for soils containing organochlorine pesticides (OCPs) above residential environmental screening levels (ESLs). The PMP will also include a RWQCB-approved, site specific cleanup level for OCPs for soils that can be buried and managed on-site. Soil from Parcel 2 that contains OCPs above Residential ESLs will be evaluated for burial on Parcel 1 and managed in accordance with the PMP. The proposed OCP mitigation measures identified for inclusion in the PMP for the project are described below:</p>	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits

Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.10 Hazards and Hazardous Materials					
<ul style="list-style-type: none">OCP impacts are limited to the upper two feet of soil on both parcels.Soil from the upper two feet of Parcel 2 will be removed and stockpiled on Parcel 1.Approximately two feet of clean soil will be imported and placed on Parcel 2.Soil from the upper two feet of Parcel 1 will be removed, placed on asphalt or a visqueen liner, stockpiled on Parcel 1 with Parcel 2 soil, and profiled in accordance with the SMP as follows:<ul style="list-style-type: none">Soil with OCP concentrations above the Residential ESLs, but below the RWQCB-approved site specific cleanup level, will be buried in the existing 915 DeGuigne building basement and under roadways, but not where utilities will be constructed in accordance with the RWQCB-approved PMP.Soil with OCP concentrations above the RWQCB-approved, site-specific cleanup level will be disposed of off-site at a licensed disposal facility.Post soil removal confirmation sampling will be conducted using EPA-approved multi- increment sampling to verify that soil concentrations for OCPs are below Residential ESLs. <p>A deed restriction or other appropriate covenant will be placed on Parcel 1, if required by the RWQCB, detailing the location of the buried soils with OCP concentrations above the Residential ESLs. The covenant will include a map of the buried soils, restrict excavation in these areas, and require that excavation in the restricted areas be conducted in accordance with the SMP.</p>					
<p>Project Design Feature HAZ-2: Vapor Mitigation Plan. After demolition of the existing structures and removal of asphalt, the project proponent will complete soil vapor sampling to evaluate the concentrations of volatile organic compounds (VOCs) in the residential areas of Parcel 1. Based on the findings of the vapor sampling, the project proponent will prepare and submit a vapor mitigation plan (VMP) for approval by the RWQCB in accordance with the Prospective Purchaser Agreement (PPA), as described below.</p> <p>The VMP shall be prepared according to the PPA requirements to be consistent with Cal-EPA and U.S. EPA guidance, will use 10⁻⁶ cancer risk as the risk level, and will use the lower of the current RWQCB Residential ESLs and the U.S. EPA’s regional screening levels or a site-specific risk assessment to interpret the 10⁻⁶ cancer risk level. The VMP will include evaluation of risks to construction workers and shall be mitigated to a carcinogenic risk of one in a million and health hazard index of 1. If the evaluation of risk to human health exceeds this standard, or is otherwise required by the RWQCB, the VMP shall include discussion of site-specific measures to achieve this standard.</p> <p>The project, as proposed, shall install passive vapor barriers beneath all the residential buildings on Parcel 1. Installation of the passive barrier will include:</p>	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits

Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.10 Hazards and Hazardous Materials					
<ul style="list-style-type: none"> • A minimum two-inch layer of sand; • Within the two-inch layer of sand, horizontal ventilation piping will be evenly spaced throughout the building footprint, connected to a header, and directed through the building walls to the roof line; • The sand layer will be topped with a composite membrane comprised of a lower layer of approximately nine millimeter (mm) high density polyethylene (HDPE) liner welded at the seams, an over-coating of spray applied asphaltic material of a nominal 30 mm thickness covered by an optional geotextile membrane. All penetrations of the membrane shall be sealed above the top liner with asphaltic material; and <p>Verification of barrier effectiveness will be completed by a post-vapor barrier installation smoke test and sub-slab ventilation pipe vapor sampling.</p>					
<p>Project Design Feature HAZ-3: Underground Storage Tanks. All known underground storage tanks (USTs) have been removed from Parcels 1 and 2. If undocumented USTs are encountered during construction, the USTs will be removed, disposed of, and closed consistent with the City of Sunnyvale’s public safety standards. In areas of previously removed USTs, the soil shall be excavated, backfilled, and compacted as necessary. A geophysical survey and/or potholing (“Potholing” refers to the excavation of two-foot by four-foot trenches to a depth of approximately 10 feet below the ground surface to evaluate for the presence of USTs) will be completed on Parcel 2 after building demolition to determine whether the USTs on that site were removed or abandoned in place. If USTs are found on Parcel 2, the USTs will be removed. Any remaining groundwater monitoring wells on-site shall be removed in accordance with the Santa Clara Valley Water District (SCVWD) procedures and requirements.</p>	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits
<p>Project Design Feature HAZ-4: Soil Management Plan/HASP. The project proponent has a RWQCB approved Soil Management Plan (SMP) which addresses soil handling during construction activities. In accordance with the SMP, and based on the results of additional post-demolition sampling, if contaminants are encountered during demolition and grading above construction worker health risk levels, a licensed contractor with OSHA HAZWOPER trained personnel shall complete the intrusive subsurface activities in the contaminated areas. The trained personnel must have completed a 40-hour HAZWOPER training course. The general contractor for the project will prepare a health and safety plan (HASP) that addresses the safety and health hazards associated with all aspects of project construction in regards to worker safety. In addition, dust control, dust suppression, and air monitoring will be completed in accordance with the SMP and all applicable regulations throughout construction of the project. Haul routes for soil removed from the project site will be approved by the Public Works Director prior to commencement of off-haul activities.</p>	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits

Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.10 Hazards and Hazardous Materials					
<p>Project Design Feature HAZ-5: Grout curtain/cut-off walls are located near the former Pad C. As a condition of project approval, the following construction measures shall be implemented to protect these features during construction:</p> <ul style="list-style-type: none">Developer shall not damage the cut-off walls; if Developer needs to modify the cut-off walls, written approval shall be obtained from the Water Board prior to performing this work.Any damage to the cut-off walls shall be immediately repaired by the Developer under the oversight of the Water Board.	RWQCB; City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a grading permit	Once prior to issuance of grading permit	Approval of plans/issuance of permits
4.12 Energy					
<p>Project Design Feature ENG-1: The project proposes to meet the GreenPoint requirements, which is approximately equivalent to exceeding the State 2013 Title 24 California Energy Code requirements. GreenPoint measures a project’s sustainability through five main categories: community, energy efficiency, indoor air quality, resource conservation, and water conservation. A project must earn 80 points as a sum of the five categories to meet the City of Sunnyvale’s Green Building standards. The proposed project will implement the following green building measures:</p> <ul style="list-style-type: none">Drought tolerant landscapingUse of recycled water for irrigationDesign and shielding of outdoor lighting to reduce light pollutionEnergy efficient water heatersLow-flow fixturesEnergy-star rated appliancesA minimum of 65 percent diversion of construction and demolition wasteBest management practice methods for stormwater control including filtration and bio-retention featuresTrees to reduce the heat island effect.	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a building permit; plan for diversion of construction and demolition waste prior to demolition permit (if issued prior to building permit).	Once prior to issuance of building permit; plan for diversion of construction and demolition waste prior to demolition permit (if issued prior to building permit); periodic inspection during construction.	Approval of plans/issuance of permits; field inspection sign-off

Design Features	Enforcement Agency	Monitoring Agency	Monitoring Phase	Monitoring Frequency	Compliance Action
4.13 Utilities and Service Systems					
Project Design Feature UTL-1: The site layout of the proposed residential development should be designed to allow the space and flexibility to store recyclable materials currently collected by the City programs as well as food waste and other materials that may be collected in the future as the City implements the Zero Waste Strategic Plan.	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Prior to issuance of a building permit	Once prior to issuance of building permit	Approval of plans/issuance of permits
Project Design Feature UTL-2: As a condition of project approval, the project shall include a waste management plan to comply with the City’s Waste Management Plan, includes recommendations for waste management during construction and operation of the project. The project’s waste management plan will be submitted to the City for approval prior to issuance of occupancy permits and will include the following measures: <ul style="list-style-type: none">Describe the volume of waste to be generated during demolition and construction;Identify the weight of materials to be reused, recycled, or diverted from the landfill from the generated construction waste; andIdentify the waste disposal location for the remaining non-recycled construction waste/materials.	City of Sunnyvale Department of Community Development	City of Sunnyvale Department of Community Development	Operation	Once, prior to issuance of certificate of occupancy	Issuance of certificate of occupancy