Memorandum

DEPARTMENT OF COMMUNITY DEVELOPMENT
Building Neighborhood and Business Services **Planning**

Date: May 17, 2021

To: Planning Commission

From: Sheri Bermejo, Planning Division Manager

Subject: Draft Mitigated Negative Declaration (IS/MND) for Chick-fil-A and Starbucks Project at 820 West Huntington Drive

It has come to our attention that project applicant's environmental consulting firm accidentally omitted the Geology and Soils Section (Section 4-07) from the public review draft Initial Study/Mitigated Negative Declaration publication. This section is attached to this memorandum and will be included as part of the Final IS/MND publication, within an errata chapter. This errata, clarifications and modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft IS/MND and do not affect the overall conclusions of the Draft IS/MND.

4.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii. Strong seismic ground shaking?			✓	
iii. Seismic-related ground failure, including liquefaction?			✓	
iv. Landslides?				✓
b. Result in substantial soil erosion or the loss of topsoil?			✓	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d. Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			✓	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater?				✓
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			✓	

The information presented in this analysis is based on and supplemented with the *Geotechnical Engineering Exploration and Analysis* (Geotechnical Analysis) prepared by Giles Engineering Associates, Inc., dated May 18, 2020; refer to Appendix C, *Geotechnical Analysis*.

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. Southern California, including the project area, is subject to the effects of seismic activity due to active faults that traverse the area. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone.

According to the Geotechnical Analysis, the project site is not located within an Alquist-Priolo Earthquake Fault Zone. The possibility of damage due to ground rupture is

considered low since no active faults are known to cross the site. Since no known active faults exist in the immediate site vicinity (the closest fault is located approximately 0.96 miles away); refer to Response 4.6[a][ii]) and the site is not located within an Alquist-Priolo Earthquake Fault Zone, the project is not anticipated to result in the rupture of a known earthquake fault. No impact would result in this regard.

Mitigation Measures: No mitigation measures are required.

ii. Strong seismic ground shaking?

Less Than Significant Impact. Southern California has numerous active seismic faults subjecting residents to potential earthquake and seismic-related hazards. Seismic activity poses two types of potential hazards for residents and structures, categorized either as primary or secondary hazards. Primary hazards include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Primary hazards can also induce secondary hazards such as ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires.

According to the Geotechnical Analysis, the Raymond and Sierra Madre faults are the closest known active faults and are located approximately 0.96 and 2.31 miles from the site, respectively. These faults would likely generate the most severe seismic ground shaking at the site with an anticipated maximum moment magnitude (Mw) of 7.3. The site, therefore, may be subject to strong ground shaking during seismic activity.

The project would be required to demonstrate compliance with applicable seismic-related design requirements, including the California Building Code (CBC), *Minimum Design Loads and Associated Criteria for Buildings and Other Structures* Standard ASCE 7-16, and other applicable local codes (including Municipal Code Chapter 15.28, *Grading and Erosion Control*). These existing regulations would enforce the site-specific design recommendations identified in the Geotechnical Analysis in order to minimize the potential for damage and major injury during a seismic event; refer to Section 7.1, *Seismic Design Considerations*, of Appendix C. Specifically, pursuant to Municipal Code Section 15.28.070(A)(9), recommendations included in the Geotechnical Analysis must be incorporated into the project as a condition to the issuance of a building permit. These regulations include standards related to soils and foundations, structural design, building materials, and structural testing and inspections. Adherence to these building requirements and site-specific recommendations from the Geotechnical Analysis would minimize risks related to seismic ground shaking (Standard Condition GS-1). The project, therefore, would not expose people or structures to potential adverse effects of strong seismic ground shaking. Less than significant impacts would occur in this regard.

Standard Conditions:

SC GS-1 Prior to issuance of a grading permit or encroachment permit, the respective Applicant shall provide a geotechnical report that addresses earthwork and foundation recommendations, including but not limited to, earthwork, retaining walls and foundation construction adjacent to the existing structures located on the property, pavement structural sections and recommendations. The geotechnical report shall include data regarding the nature, distribution and

strengths of existing soils, conclusions and recommendations for grading procedures, design criteria for and identified corrective measures, and opinions and recommendations regarding existing conditions and proposed grading. The report shall also include subsurface geology of the site, degree of seismic hazard if any, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, opinions and recommended design criteria to mitigate any identified geologic hazards including locations of surface and subsurface fault lines in the area as applicable. Provide off-site and on-site pavement structural section to be address with recommendation based on Traffic indexes and R values, per Caltrans methods.

Mitigation Measures: No mitigation measures are required.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Primary seismic shaking can induce ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, seismically induced water waves (tsunamis and seiches), movement on nearby independent faults (sympathetic fault movement), and dam failure. Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Saturated, loose to medium dense, near surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Dynamic settlement of dry loose sands can occur as the sand particles tend to settle and densify as a result of a seismic event.

According to the Geotechnical Analysis, the project site does not lie within a designated Liquefaction Hazard Zone. The project site is underlain by younger alluvial basin deposits and consists of generally dry to moist, loose to firm silty fine sand and fine to coarse sand. In addition, historic high groundwater is about 175 feet below ground surface (bgs). Based on these conditions, the Geotechnical Analysis determined that a liquefaction analysis is not necessary for the site. The project, therefore, is not anticipated to expose people or structures to potential adverse effects due to liquefaction. Less than significant impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

iv. Landslides?

No Impact. The Geotechnical Analysis concluded that the proposed construction and grading for the two restaurant facilities would be safe against geotechnical hazards such as landslides, settlement, or slippage. The Geotechnical Analysis also concluded that the proposed work would not adversely affect the geologic stability of the adjacent property provided that grading and construction are performed in compliance with the local codes and recommendations presented in Section 7.0 of the Geotechnical Analysis (as enforced through SC GS-1); refer to Appendix C. Further, the project site is generally flat and would

not create substantial slopes or features that increase the landslide potential beyond existing conditions. As such, no impact would result in this regard.

Standard Conditions: Refer to SC GS-1.

Mitigation Measures: No mitigation measures are required.

b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The primary concern in regard to soil erosion or loss of topsoil would be from construction activities associated with the project (e.g., earthwork and grading). Construction activities associated with the project would expose on-site soils to short-term erosion by wind and water; however, as the project would disturb more than one acre of soil, the project would require preparation of a Storm Water Pollution Prevention Plan (SWPPP) for approval by the City engineer prior to construction pursuant to the National Pollution Discharge Elimination System (NPDES) program; refer to Section 4.10, *Hydrology and Water Quality*. The SWPPP would identify best management practices (BMPs) to be implemented with the project to prevent erosion, minimize siltation impacts, and protect water quality. Adherence to the SWPPP would reduce, prevent, or minimize soil erosion from project-related grading and construction activities. During project operation, the project would be mostly paved with any unpaved areas improved with approximately 13,081 square feet of ornamental landscaping. Thus, soil erosion or loss of topsoil are unlikely to occur during project operation. Following compliance with the applicable regulations, including implementation of BMPs associated with NPDES requirements, the project would result in less than significant impacts involving soil erosion and loss of topsoil.

Mitigation Measures: No mitigation measures are required.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. Refer to Responses 4.7(a)(*iii*), 4.7(a)(*iv*), and 4.7(d) for a discussion concerning liquefaction, landslides, and expansive soils, respectively.

Lateral Spreading

Lateral spreading is a phenomenon in which large blocks of intact, non-liquefied soil move down slope on a liquefied soil layer. Lateral spreading is often a regional event. For lateral spreading to occur, the liquefiable soil zone must be laterally continuous, unconstrained laterally, and free to move along sloping ground. The project site's potential for lateral spreading is considered low based on its low liquefaction potential; refer to Response 4.7(a)(*iii*). Less than significant impacts would occur in this regard.

Soil Shrinkage and Subsidence

According to the Geotechnical Analysis, general types of ground failures that might occur as a consequence of severe ground shaking typically include landsliding, ground subsidence, ground lurching, and shallow ground rupture, all of which are considered unlikely at the project site. Nonetheless, the project would be required to demonstrate compliance with applicable

CBC and design requirements as well as the site-specific design recommendations identified in Section 7.0 of the Geotechnical Analysis to reduce impacts related to unstable soil conditions (as enforced through SC GS-1). Compliance with applicable design requirements and recommendations would reduce impacts. Less than significant impacts would occur in this regard.

Standard Conditions: Refer to SC GS-1.

Mitigation Measures: No mitigation measures are required.

d. Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. Expansive soils are those that undergo volume changes as moisture content fluctuates, swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement, and distorting structural elements.

According to the Geotechnical Analysis, the project site has a very low expansion potential. Nonetheless, the project would be subject to compliance with applicable CBC and Standard ASCE 7-16 requirements as well as site-specific design recommendations identified in the Geotechnical Analysis (as enforced through SC GS-1). Compliance with applicable design requirements would reduce impacts in regard to expansive soil, if any. Less than significant impacts would occur in this regard.

Standard Conditions: Refer to SC GS-1.

Mitigation Measures: No mitigation measures are required.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater?

No Impact. The project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, no impacts would result in this regard.

Mitigation Measures: No mitigation measures are required.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. The project site was previously disturbed and graded during development of the existing restaurant building and associated surface parking lot. Based on the Geotechnical Analysis, the site is generally underlain by younger alluvial basin deposits, and possibly fill was encountered in depth ranging from 3.5 to 10 feet bgs. As a result, paleontological resources are not anticipated to be encountered during project grading activities. Nevertheless, in the event that paleontological resources are discovered during project earthwork or excavation, Standard Condition SG-2 would require all project construction activities to halt until a paleontologist identifies the paleontological significance

of the find and recommends a course of action. Thus, following implementation of Standard Condition GS-2, less than significant impacts would occur in this regard.

Standard Conditions:

SC GS-2 If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity in that area shall cease within 50 feet of the discovery and the construction contractor shall contact the City Planning Division. With direction from the City Planning Division, a qualified paleontologist (B.S./B.A. in geology, or related discipline with an emphasis in paleontology and demonstrated experience and competence in paleontological research, fieldwork, reporting, and curation) shall evaluate the find and recommend a course of action. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for identified resources. Construction shall not resume within 50 feet of the discovery until the site paleontologist states in writing that the proposed construction activities would not significantly damage paleontological resources.