

Appendix FEIR-8

Details of Project Buildout and Construction

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Several commenters raised questions regarding construction of the Project. The following construction assumptions were reviewed and approved by AECOM, the pre-construction general contractor for the Project, regarding construction of the Project. This information was used to prepare the impact analyses for the Project that are included in the EIR.

Construction Hours

In accordance with Los Angeles Municipal Code (LAMC) requirements, construction activities would be permitted to occur Monday through Friday from 7:00 A.M. to 9:00 P.M. and between 8:00 A.M. and 6:00 P.M. on Saturday or national holidays, or outside of these hours if approved by the Los Angeles Board of Police Commissioners.¹ Construction workers are expected to arrive at the Project Site before construction starts and leave when construction ends.²

Construction Worker Parking

Project construction worker parking is expected to be entirely provided on-site. If temporary periods occur where parking is not available on-site, worker parking will be provided in nearby existing parking structures or surface parking facilities.³ In accordance with the Construction Traffic Management Plan (refer to Project Design Feature TR-PDF-1 on page IV.K-36 of the Draft EIR), Project construction workers would be prohibited from parking on adjacent streets or in predominantly residentially zoned areas.⁴

¹ Page IV.I-35 of the Draft EIR.

² Page IV.I-41 of the Draft EIR.

³ Pages 180 and 181 of Appendix M.1, Transportation, to the Draft EIR.

⁴ Project Design Feature TR-PDF-1 is included in Section IV.K, Transportation, of the Draft EIR and is also included in Section IV, Mitigation Monitoring Plan, of this Final EIR.

Earthwork Activities and Demolition Quantities

Earthwork activities necessary for construction would require up to an estimated 772,000 cubic yards of cut, potentially 50,000 cubic yards of imported fill and up to 772,000 cubic yards of export, with a maximum excavation depth of approximately 45 feet below grade.⁵ It should be noted that the Project would use on-site soil instead of imported soil where feasible and that where imported soil is required export trucks could be used to bring imported soil to the Project Site (i.e., resulting in a reduction in total import/export truck trips). Nonetheless, the analysis of import/export was conservatively evaluated in the Draft EIR based on a total of 822,000 cubic yards. The Project would also include demolition of approximately 495,860 square feet of existing floor area.⁶

Staging

All haul truck staging would occur on-site per the Los Angeles Department of Transportation's (LADOT) approval letter dated June 30, 2022.⁷ Please refer to Figure 1 on page 3 for the locations of the on-site staging areas. As shown therein, the on-site staging areas for the haul trucks would be located along the northern property line and along the southern property line. Each of the staging areas would provide the capacity to accommodate up to 30 trucks. The two off-site staging locations described and evaluated in the Draft EIR are no longer proposed and have been removed from consideration and evaluation. The removal of the staging locations is included in Section III, Revisions, Clarifications, and Corrections to the Draft EIR.

Haul Routes

As discussed in Section II, Project Description, of the Draft EIR, hauling activities would occur between the hours of 7:00 A.M. and 4:00 P.M. with approval from the Bureau of Engineering District Engineer as well as between 8:00 A.M. and 4:00 P.M. on Saturdays. Exported soil materials likely would be disposed of at United Rock Products Landfill in Irwindale via the Santa Monica Freeway (I-10) east to State Route 60 (SR-60) east to the San Gabriel River Freeway (I-605) north to Irwindale. Empty construction haul trucks would travel on approved inbound truck routes between the Project Site and the Santa Monica Freeway (I-10) via the following optional routes:⁸

⁵ Page II-33 of the Draft EIR.

⁶ Refer to Table II-2 of Section II, Project Description, of the Draft EIR.

⁷ Refer to Appendix M.5 of the Draft EIR for the LADOT approval letter.

⁸ Refer to Appendix M.5 of the Draft EIR for LADOT's approval letter for these haul routes.



- Option 1: Empty trucks would travel westbound on I-10, exit at Washington Boulevard/Fairfax Avenue, turn right (north) on Fairfax Avenue and turn right (east) to enter the Project Site from Fairfax Avenue (or continue north and make a right on Beverly Boulevard and then access the Project Site from Beverly Boulevard at the Genesee Avenue signal).
- Option 2: Empty trucks would travel westbound on I-10, exit at La Brea Avenue, turn right (north) on La Brea Avenue, turn left (west) on San Vicente Boulevard, turn right (north) on Fairfax Avenue and enter the Project Site from Fairfax Avenue (or continue north and make a right turn on to Beverly Boulevard to access the Project Site from Beverly Boulevard at the Genesee Avenue signal).
- Option 3: Empty trucks would travel westbound on I-10, exit at La Brea Avenue, turn right (north) on La Brea Avenue, turn left (heading west) on Beverly Boulevard and enter the Project Site from Beverly Boulevard at the Genesee Avenue signal.

Loaded construction haul trucks would travel on approved outbound truck routes between the Project Site and the Santa Monica Freeway (I-10) via the following optional routes:

- Option 1: Loaded trucks would exit the Project Site from Beverly Boulevard at the Genesee Avenue signal heading west and then turn left on Fairfax Avenue heading south, turn left on Washington Boulevard, and enter eastbound I-10.
- Option 2: Loaded trucks would exit the Project Site from Beverly Boulevard at the Genesee Avenue signal heading west and then turn left on Fairfax Avenue heading south, turn left on San Vicente Boulevard (east), turn right (south) on La Brea Avenue, and enter eastbound I-10.
- Option 3: Loaded trucks would exit the Project Site on Fairfax Avenue heading north, turn right on Beverly Boulevard (east) (or exit the Project Site via a right turn on Beverly Boulevard heading east), turn right (heading south) on La Brea Avenue, and enter eastbound I-10.

Any hazardous soil materials would be exported to Buttonwillow Landfill in Kern County using the same local roadways, as follows:

- Option 1: Loaded trucks would travel along Beverly Boulevard west to Fairfax Avenue, south to Washington Boulevard, east to I-10, west to I-405, north to I-5, north to Route 58, west to Lokern Road.
- Option 2: Loaded trucks would travel along Beverly Boulevard west to Fairfax Avenue, south to San Vicente Boulevard, east to La Brea Avenue, south to I-10, west to I-405, north to I-5, north to Route 58, west to Lokern Road.

- Option 3: Loaded trucks would travel along Fairfax Avenue north to Beverly Boulevard, east to La Brea Avenue (or Beverly Boulevard east to La Brea Avenue), south to I-10, west to I-405, north to I-5, north to Route 58, west to Lokern Road.

Timeframe of Project and Associated Truck and Equipment Mix

Project buildout may occur in one phase with a total construction period of approximately 32 months. Construction could begin as soon as 2023 and end as soon as 2026. This represents a conservative scenario because a project's construction air quality and GHG impacts normally decrease if the commencement of construction is pushed back (i.e., occurs in a later year) because each year newer equipment enters the fleet mix with more stringent emission standards that reduce emissions. The Project Applicant is seeking a Development Agreement with a term of 20 years, which could extend the full buildout year to approximately 2043, in which case construction would occur through a multi-phased, non-continuous buildout.

32-Month Schedule

The 32-month construction schedule and associated maximum daily truck and delivery trips are included in Table 1 on page 6.

Table 1
Construction Schedule and Maximum Daily Haul and Delivery Truck Trips^a

Construction Phase	Start Date	End Date	Approximate Duration (Months)	Days	Daily Haul Trips (Contaminated Soil) ^{b,c}	Daily Haul/Delivery/Vendor Trips ^d
Demolition	10/01/2023	12/31/2023	3	65	0	80
Grading/Excavation	10/16/2023	6/30/2024	8	185	46	640
Mat Foundation	7/1/2024	7/7/2024	< 1	5	0	1,000
Structural/Enclosure	7/8/2024	5/31/2025	11	235	0	100
Architectural Coatings/Finishing	4/1/2025	5/31/2026	14	304	0	60
Paving/Landscape	5/1/2026	5/31/2026	1	21	0	10

^a Construction phase schedule and truck trip information was included on pages 30–32 of Appendix B of the Draft EIR (CalEEMod 2020 Output Files, Section 3.0 Construction Detail). As shown therein, demolition would result in 80 daily vendor/delivery trips. Although these trips are for hauling of debris, CalEEMod 2020 only allows total haul trips as an input. Thus, to account for peak daily trips, these trips were input as delivery/vendor trips and fleet mix was adjusted consistent with hauling vehicle class and trip length was adjusted to account for hauling to disposal site. This also occurs for grading/excavation in which the CalEEMod 2020 input included 640 vendor trips of which 600 trips would be for hauling of import/export and 40 trips could be used for deliveries. All trips were assumed to be of hauling vehicle class and trip length was adjusted to account for hauling to the import/export site.

^b CalEEMod 2022 was released subsequent to the completion of the Draft EIR and requires input of daily haul trucks instead of total haul trucks. As shown in the Confirmatory Air Quality, GHG, and Energy Impacts Analysis in Response to Comments, included in Appendix FEIR-9 of this Final EIR, demolition includes 80 haul truck trips and grading/excavation includes 40 vendor trips and 600 haul truck trips.

^c As shown in Appendix B of the Draft EIR, the CalEEMod 2020 modeling also included a total of 8,572 haul trips (equivalent of 46 daily haul trips). These trips account for the additional vehicle miles travelled (145 miles per trip) related to any hazardous soil materials (60,000 cy / 14 cy truck capacity x 2 trips)

^d This truck trip information is also included in Table IV.I-11 of Section IV.I, Noise, of the Draft EIR. Total truck trips during overlap of demolition and grading/excavation subphases would be limited to 640 trips.

Source: TVC 2050 Project Draft EIR, 2022.

Construction worker quantities under the 32-month schedule are included in Table 2 on page 7.

Table 2
Worker Quantities (32-Month Construction Schedule)^a

Construction Phase	Number of Peak Daily Workers	Number of Peak Daily Worker Trips
Demolition	50	100
Grading/Excavation/Foundation	245	490
Mat Foundation (Concrete Pour Days)	50	100
Structure/Enclosure	675	1,350
Concurrent Architectural Coatings/Finishes/Paving/Landscape	970	1,940

^a Construction worker trip information was included on page 32 of Appendix B of the Draft EIR (CalEEMod Output Files, Section 3.0 Construction Detail). Worker trips were calculated based on two trips per employee. Note that the concurrent architectural coatings/finishes/paving/landscape workers was inadvertently input into CalEEMod as 790 workers instead of 970. This is corrected in Section III, Revisions, Clarification, and Corrections to the Draft EIR.

Source: TVC 2050 Project Draft EIR, 2022.

The estimated peak daily construction equipment during the 32-month schedule is provided in Table 3 on page 8.

Table 3
Construction (32-Month Schedule) Peak Daily Equipment Mix^a

Equipment	Demo	Grading/ Excavation	Mat Foundation	Structure/ Enclosure	Architectural Coatings/ Finishes	Paving/ Landscape
Air Compressor					6	
Aerial Lift (Electric)				14 ²	14	
Bore/Drill Rig		6				
Cement and Mortar Mixers						
Concrete/Industrial Saws	2					
Cranes (Tower)				4 ²	4	
Cranes (Mobile)		2				
Crawler Tractors						
Crushing/Proc. Equipment						
Excavators	4	3				
Forklifts				2	2	
Generator Sets						
Graders						
Off-Highway Tractors						
Other Equipment				4		
Water Truck	1	2				
Pavers						
Paving Equipment						1
Pumps		4	6	2		
Plate Compactors			6			
Rollers						1
Rough Terrain Forklifts						
Rubber Tired Dozers	2	3				
Rubber Tired Loaders		2				
Scrapers						
Signal Boards						
Skid Steer Loaders						2
Surfacing Equipment						
Sweeper/Scrubbers						
Tractors/Loaders/Backhoes		3		1		
Trenchers						1
Welders		2		2		

^a Construction equipment information was included on pages 30-32 of Appendix B of the Draft EIR (CalEEMod Output Files, Section 3.0 Construction Detail).

^b Electric equipment not included in CalEEMod 2020 and the associated air quality and GHG analyses in the Draft EIR. This equipment was accounted for in the construction noise analysis.

Source: TVC 2050 Project Draft EIR, 2022.

Installation of temporary groundwater wells is anticipated to be initiated during the demolition construction phase prior to excavation. The Draft EIR analysis assumed that the installation of the wells could occur using the off-road equipment mix provided during the overlap of demolition and excavation phases, which would conservatively evaluate overlapping emissions. Nonetheless, off-road construction equipment (two drill rigs, one front-end loader, one backhoe, and one excavator) have been included in the demolition phase pre-excavation in the Confirmatory Air Quality, GHG, and Energy Impacts Analysis in Response to Comments, included in Appendix FEIR-9 of this Final EIR.

In addition, CalEEMod modeling output files (page 31) provided in Appendix B, Air Quality and Greenhouse Gas Emissions, of the Draft EIR, showed that the excavation phase included four pumps, the mat foundation phase included six pumps, and the structure/enclosure phase included two pumps, which could be used for dewatering. Consistent with Mitigation Measure AIR-MM-1, the Project is committing to the use of dedicated dewatering pumps that would be electric and not diesel. The Project would include up to 26 0.5-horsepower dewatering/treatment pumps operating 24 hours per day for 21 months.

The Project may also require mat foundations for some of the proposed structures, which as shown in Table 1 above would require up to 500 concrete delivery trucks (500 truck trips in and 500 truck trips out) on a concrete pour day. These types of concrete pours would be limited to approximately five large pours with a maximum of 50 workers on-site on the busiest day of this subphase (50 worker trips in and 50 worker trips out).

The overlap between architectural coating/finishing/paving/landscape subphases would include up to approximately 35 daily delivery truck round-trips (35 truck trips in and 35 truck trips out) and a maximum of 970 on-site workers on the busiest day (970 worker trips in and 970 worker trips out). Delivery truck activity would occur consistently throughout an 8-hour workday.

Long-Term Buildout

In addition to the 32-month schedule, long-term buildout of the Project was also evaluated in which the Project would be built in multiple non-consecutive phases. The Project would likely be developed according to the locations of proposed subterranean parking structures. It is impractical and inefficient to build subterranean parking structures in sections, and similarly impractical to construct above-ground structures separately from the subterranean parking it sits on. Therefore, entire subterranean structures as well as the surface development on top of those structures would likely be built together, constituting a phase of construction. Therefore, at most, there could be approximately four total phases of below-grade construction, any of which individually would be substantially less intensive (in terms of required construction equipment, haul/delivery truck trips, and

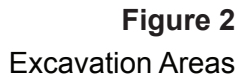
construction employees, as discussed further below) than a single phase of construction. As shown in Figure 2 on page 11, each of the defined areas of construction would be a minimum of approximately 5 acres.⁹ In addition, the number of individual construction phases is likely to be relatively small due to the land uses on the Project Site itself. Sound stages and the production activities that occur within the sound stages require an environment as free from outside noise and vibration as possible, so the Project is not likely to be developed in a large number of small phases while concurrently trying to operate sound stages.

Under the long-term buildout scenario, no changes in the total amount of soil hauled or the square footage of structures to be demolished would occur in comparison to the 32-month schedule. In addition, the number of hours that equipment would need to operate would remain the same in either scenario since the scope of work would not change. Under the long-term buildout scenario, the amount of equipment operated on a day-to-day basis would be reduced due to the reduction in square footage of construction built at any one time. Overall, the same amount of gross building square footage would be built in either scenario. Therefore, the same amount of material needed to be constructed and delivered to the Project Site would remain the same. However, the number of daily deliveries would be substantially reduced as less work would be conducted each day.

The following assumptions/parameters were specifically developed to evaluate the long-term buildout air quality impacts in which the applicable SCAQMD significance threshold is a daily threshold in terms of pounds per day of specified pollutant (e.g., durations of construction activities are not factored into impacts). Specifically, the full buildout of the Project was extended to approximately 2043 and overlapping Project construction and operational activities were evaluated (worst-case day over each construction period combined with ongoing operational activities). Analysis of these concurrent activities were considered in five-year increments. As shown on page 24 of Appendix B to the Draft EIR, a summary was provided of the CalEEMod modeling results for each of the interim year start dates (i.e., 2026, 2030, 2035, and 2040) at 100 percent intensity.¹⁰ Construction activities were conservatively assumed to occur at approximately 50 percent of the maximum daily intensity that would occur during the shorter 32-month single-phase construction duration (2023–2026), with the exception of mat pour activities which were assumed to be the same as under the 32-month single-phase construction duration. Specifically, with a long-term buildout and operation of some facilities on-site while construction is occurring, only a single excavation operation could be accommodated on-site, thus reducing the excavation activities and associated haul truck trips by half. A

⁹ Also note that ancillary small-scale construction work would not be considered a phase.

¹⁰ CalEEMod output files for the interim year construction scenarios was provided on pages 128 through 227 of Appendix B to the Draft EIR.



single excavation operation would only result in 300 daily haul truck trips instead of 600 trips. Other construction activities such as building construction and finishing would likely occur at a further reduced level, but were still assumed to occur at 50 percent of the maximum daily intensity. Once again, the purposes of these assumptions are to evaluate peak daily emissions during long-term reduced intensity construction activities along with concurrent operations. The following interim years were evaluated: Year 2026 (20 percent completed); Year 2030 (40 percent completed); Year 2035 (60 percent completed); Year 2040 (80 percent completed); and Year 2043 (100 percent completed). For each of the interim years, peak daily reduced intensity construction activity (i.e., number of pieces of equipment, vendor/delivery trips, worker trips, and haul trips) was assumed to occur. These assumptions are not intended to imply that construction activities would occur on a daily basis over the entire 20-year development period.

The overall manhours needed for construction would remain the same under both the 32-month and 20-year construction scenarios because the overall scope of work would be the same. However, the supervision hours of that work would increase due to the 20 years of construction. The increase in staff would be limited to the general contractor's staff. AECOM estimates that the 32-month scenario would require approximately 1,920 work months (average of 60 workers for 32 months) for the general contractor's staff. In the long-term buildout scenario, AECOM estimates that this would increase by 12.5 percent to 2,160 work months (average of 9 workers for 20 years). This increase is the equivalent of one additional worker per day (two vehicular trips) over the 20-year duration.

On-Site Construction Truck/Vehicle Activity

The existing Project Site includes extensive paved surface parking and paved roadways. Project construction will utilize the existing paved network to limit travel on unpaved surfaces, thereby reducing possible fugitive dust. Provided below is a summary of the parameters used for on-site construction trucks/vehicles.

- Construction employees would travel a maximum of approximately 500 feet on paved surfaces to designated paved surface parking areas. Speed limit will be a maximum of 15 miles per hour (mph).
- Construction delivery trucks would travel to designated paved staging areas a maximum of approximately 2,100 feet per delivery on paved surfaces. Speed limit will be a maximum of 15 mph.
- Construction haul trucks used for demolition activities would travel to construction debris pickup locations on paved surfaces a maximum of approximately 2,100 feet per haul on paved surfaces with limited travel on

unpaved surfaces near the active work zone to position for loading/unloading. Speed limit will be a maximum of 15 mph.

- Construction haul trucks used for import/export activities would travel a maximum of approximately 1,600 feet per haul on paved surfaces, approximately 400 feet per haul on unpaved surfaces (fugitive dust controlled by soil stabilizer), and approximately 200 feet per haul near the active work zone (fugitive dust controlled by watering 3 times daily). Speed limit will be a maximum of 15 mph on paved surfaces; 10 mph on unpaved surfaces controlled by soil stabilizers; and 5 mph near the active work zone to position for loading/unloading. CalEEMod provides a default control factor of 74 percent for watering of unpaved roads three times daily and 84 percent for application of dust suppressants.

Note that the speed limit parameters are included as Project Design Features in Section III, Revisions, Clarifications, and Corrections to the Draft EIR. The on-site speed limits would be enforced via signage.