

3.1 Introduction

This Draft environmental impact report (EIR) has been prepared to evaluate environmental impacts that could result from implementation of the proposed Flintridge Sacred Heart Academy Specific Plan. The City of La Cañada Flintridge (LCF), as the Lead Agency, has the authority to prepare this Draft EIR and, after the comment/response process, certify the Final EIR and approve the proposed project. LCF and responsible agencies have the authority to make decisions on discretionary actions relating to the development of the proposed project. This Draft EIR is intended to serve as an informational document to be considered by LCF and the responsible agencies during deliberations on the proposed project to evaluate the proposed project's impact on the environment.

3.2 Project Objectives

The proposed Specific Plan identifies goals and objectives to provide guidance on the revitalization of the Flintridge Sacred Heart Academy (FSHA) campus. The objectives provide a transparent statement of the immediate and long-term goals for campus operations and facilities. These include:

- Create an updated, modernized secondary school campus that provides for the intellectual, physical, social, and spiritual needs of the student body through an integrated campus design that meets educational and technological demands.
- Implement a coordinated revitalization plan that allows the campus to meet the needs of the allowed number of students.
- Combine old and new architecture to enable the campus to function as an integrated and state-of-the-art educational facility that meets the needs of students and visitors.
- Maximize resources for an overall limited number of students efficiently and effectively.
- Allow FSHA to remain competitive with other comparable educational institutions by offering a physical facility that is able to support the resources necessary to maintain a diverse student body and existing certifications.
- Effectively manage vehicular traffic when entering and exiting the school campus.
- Create a physically attractive and historically sensitive school campus that is compatible with the surrounding environment.
- Preserve and protect the Dominican Sisters' mission of educating a diverse population of young women, which has extended more than 80 years.

In addition to the Specific Plan goals, the following project and development objectives are identified to ensure that the Specific Plan goals are met:

- To continue to provide the residents of La Cañada Flintridge with an exemplary educational institution that is an asset to the community.

- To modernize the FSHA facilities, including its existing High School Building, to meet the demands of 21st-century education.
- To allow for improvements and modernization of the FSHA campus as a whole while regulating development in harmony with all neighboring single-family uses.
- To benefit and support the FSHA's arts and humanities programs by consolidating arts and humanities into a single building and providing improved and expanded performing arts space in a modern facility.
- To consolidate and centralize campus parking and reduce the number of surface parking areas.
- To improve on-campus vehicular circulation and reduce traffic impacts on neighborhood streets.
- To respect and reinforce the architectural and landscape traditions that give the FSHA campus its unique character.
- To increase the functionality of the campus space and provide access throughout while respecting the natural hillside terrain.
- To minimize the visual impact and height of new buildings by building into hillsides wherever feasible.
- To increase the FSHA's enrollment to 425 students to reflect the FSHA's current educational capacity.
- To establish comprehensive long-term planning of the entire FSHA campus for administration by the City of La Cañada Flintridge.

3.3 Project Location and Setting

3.3.1 Location

FSHA is in the city of La Cañada Flintridge, which is a small hillside residential community at the western edge of the San Gabriel Valley, nestled along the foothills of the San Gabriel Mountains to the north and the San Rafael Hills to the south. The cities of Glendale and Pasadena are southwest and southeast of LCF, respectively, and the unincorporated communities of La Crescenta and Altadena surround the western and northern boundaries of LCF. LCF, which developed as a suburb of Los Angeles, is home to the Jet Propulsion Laboratory (JPL) campus. LCF was officially incorporated in 1976.

FSHA is a girls' college-preparatory private school (serving grades 9 through 12) in the hills of southern LCF. The FSHA campus is on St. Katherine Drive, in a residential area north of State Route 134, west of Interstate 210, east of State Route 2, and west of the Arroyo Seco in Pasadena (see Figure 3-1). A majority of the campus is situated north of St. Katherine Drive and west of Palmerstone Drive, with the existing Administration Building and undeveloped land on the southern side of St. Katherine Drive. The LCF-Pasadena border runs along portions of the campus; a small section of the campus is in the city of Pasadena (see Figure 3-2).

3.3.2 Environmental Setting

Originally, the first structures on the campus site were part of a resort hotel opened in 1927 and designed by noted architect Myron Hunt. The Dominican Sisters of Mission San Jose purchased the property in 1931 and founded FSHA as a boarding school for girls in grades 1 through 12. The campus is surrounded by hills and low-density residential uses (i.e., single-family homes) that gradually developed after the school was established on the site. The area surrounding the campus has steep terrain, with areas to the north, south, and east sloping down from the campus. There is a small knoll of residential properties to the west that slope upward from St. Katherine Drive.

FSHA was initially within the jurisdictional boundaries of the City of Pasadena. When LCF was incorporated in 1976, the FSHA property was split between the jurisdictions of Pasadena and LCF. Approximately 24.13 acres of the 42-acre FSHA property are currently outside the boundaries of LCF in the city of Pasadena (see Figure 3-3).

The original campus structures include the Administration Building, six cottages, the pool, and the bridge that crosses St. Katherine Drive. The Administration Building houses the Dominican Sisters and boarding students with additional office and meeting spaces. The cottages are used as classrooms, administrative offices, meeting spaces, and college counseling offices.

FSHA began accepting day/commuter students in 1951, phasing out the elementary grades and becoming exclusively a secondary college-preparatory school with both day/commuter students and boarding students. In 1952, the High School Building was constructed. It currently accommodates classrooms, a library, and offices. In 1956, a gymnasium/auditorium was built. It continues to serve as the school's auditorium and also provides classroom space.

The school has been operating continuously since 1931. It operated as an "existing nonconforming use" until 1994, when it obtained a Conditional Use Permit (CUP) from LCF for the school use, covering the existing campus structures and some future planned improvements, including a Student Activities Center and a soccer/softball field (completed in 1998). The approved 1994 CUP, which established a student enrollment cap of 385, also provided for demolition of the existing auditorium (built 1956), construction of a new performing arts building, and upgrades to the existing High School Building. The theater and High School Building projects approved in the 1994 CUP have not yet been constructed. FSHA continues to operate pursuant to the 1994 CUP.

Currently, the FSHA campus has a building floor area of approximately 217,350 square feet, enrollment of approximately 414 students, and a faculty/staff of 84. For the 2012–2013 school year, enrollment consisted of 58 boarding students, who reside on campus, and 356 day students, who commute primarily from the cities of LCF, Pasadena, and Glendale.

3.4 Project Description

3.4.1 Proposed Specific Plan Overview

In 1994, FSHA obtained a CUP that encompassed uses and activities related to development anticipated through the school's master plan, upgrades to existing facilities, completion of unfinished projects, and an increased enrollment cap that reflected FSHA's desired and functional operational capacity more accurately. In 2011, FSHA sought to entitle the master plan project by

applying to LCF for an updated CUP as well as zoning variances that would allow implementation of the intended improvements. In addition, a mitigated negative declaration (MND) was prepared to comply with the California Environmental Quality Act (CEQA). After review of the original master plan entitlement requests and MND, as well as incorporation of comments made by neighbors surrounding the campus, LCF determined that an EIR should be prepared. FSHA withdrew its original entitlement applications and applied for a specific plan.¹

The proposed Specific Plan is intended to allow for improvements to and modernization of the campus as a whole. Under the proposed Specific Plan, the enrollment cap would increase from 385 to 425 students, inclusive of commuter and boarding students. Upon completion of Specific Plan buildout, the total building square footage of the campus would increase from its existing 217,350 square feet to a maximum of approximately 258,100 square feet, and up to 99,000 square feet for a proposed parking structure. Facilities planned under the Specific Plan would include a new Arts and Humanities Building measuring approximately 44,200 square feet; a larger High School Building, increasing in area from its existing 19,200 square feet to approximately 32,700 square feet; and a new multi-level parking structure, providing up to 240 parking spaces (see Figure 3-4).

The Specific Plan is intended to streamline and improve overall management of the FSHA campus while ensuring that uses are developed and operated compatibly with surrounding uses. To serve this purpose, the Specific Plan contains the necessary standards, guidelines, and procedures—including provisions for development, grading, site access and circulation, parking, public infrastructure and facility improvements—and the campus' interface with adjacent land uses. The Specific Plan also envisions annexation of the 24.13 acres currently in the city of Pasadena into LCF. Once annexation is complete, the entire FSHA property would be governed by LCF through the adopted Specific Plan.

Development Plan

In addition to development standards to guide general improvements and operation of the FSHA campus, the Specific Plan also proposes six Plan Areas, four of which are targeted for major improvements for the campus. These include construction of a new on-site parking structure; modernization and expansion of the Arts and Humanities Building; expansion and renovation of the existing High School Building (including a new information center and library, college counseling facilities, and administrative offices); a campus plaza and enhanced internal open space areas through the Dominican Garden and other landscaping improvements; a new outdoor athletic area (to provide tennis courts, athletic fields, or similar sport-related active uses); and other minor campus improvements. Approximately 27.2 acres (approximately 65%) of the campus would remain undeveloped and in a natural condition. The Plan Areas are described below.

Plan Area 1 (Parking Facility)

Plan Area 1 is generally defined as the approximately 1-acre area occupied by existing parking Lot C and the perimeter around it. Plan Area 1 is on the lower portion of the campus, across from the Administration Building and downslope from the Arts and Humanities Building. This Plan Area is generally flat and improved with an asphalt-paved surface lot that accommodates approximately 74

¹ A proposed draft FSHA Specific Plan is provided in Appendix A of this Draft EIR and is also on file and available for public review at the City of La Cañada Flintridge Community Development Department.

parking spaces. Figure 3-5, *Conceptual Plan Area 1*, illustrates potential uses and general building location at full buildout of Plan Area 1. The land use plan for this area is described below.

Parking Structure

At full buildout, Plan Area 1 would include a new partially subterranean multi-level parking structure (including rooftop parking) in place of the existing Junior Lot (Lot C) parking area. The new parking structure would not exceed 3.5 levels (including two partially subterranean levels), or a maximum size of 99,000 square feet. The new facility could provide parking for up to 240 vehicles. The parking facility in Plan Area 1 would be accessed directly from St. Katherine Drive via two driveways: one connecting to the upper level (top deck) and one to a lower level

The multi-level parking structure may include a pedestrian access bridge, and stairway to establish pedestrian connection with and access to other campus areas consistent with Americans with Disabilities Act (ADA) accessibility requirements. The rooftop level of the parking structure would be at the same level as an existing walkway in front of Cottages 4, 5, and 6 to facilitate pedestrian circulation and enhance access to these campus components, which currently have limited access. The lower levels of the parking structure would be partially subterranean, set into the hillside slope with all levels partially exposed along the northern and western perimeters. Although not currently anticipated, an elevator may be included.

Parking Lot C

Until such time that a permanent parking structure is established in Plan Area 1, this area will be occupied by a surface parking lot (Lot C), except when used for approved temporary facilities (such as construction trailers and temporary buildings). Currently, Lot C is accessed by a single two-lane driveway at St. Katherine Drive.

Construction Staging and Temporary Office Trailers

During construction activities, portions of Parking Lot C may be utilized for construction staging and placement of construction office trailers, when it can be demonstrated that parking within this area is not needed.

Plan Area 2 (Arts and Humanities Building)

Planned renovation and expansion activity in Plan Area 2 includes improvements and/or replacement of the Arts and Humanities Building (Auditorium Building) and creation of series of walkways, gardens, and access facilities to enhance pedestrian circulation and offer passive recreation areas/opportunities. Figure 3-6, *Conceptual Plan Area 2*, illustrates potential uses and general building location at full buildout of Plan Area 2. The land use plan for this area is described below.

Dominican Gardens and Pedestrian Access/Connection

An existing two-story building, referred to as Cottages 1 and 2, which totals 6,460 square feet, would be demolished. Cottages 1 and 2 are part of a collection of five “cottage” buildings built in the 1930s, but not designed by Myron Hunt. The other four cottages (Cottages 3, 4, 5, and 6) would remain in place without substantial alteration.

In the area where Cottages 1 and 2 would be demolished, a new outdoor terraced garden would be installed with a meandering walkway up the slope between the parking facilities in Plan Area 1 and the High School and Arts and Humanities Buildings frontages at the upper campus level. The gardens and walkway would serve as a connection and pedestrian access corridor. Bridges and elevators may be incorporated as appropriate to address disabled access between the parking and other campus areas. The Dominican Garden would be developed in this space, providing an area for seating and reflection along the pathway route. Details of the pedestrian paths and Dominican Garden are discussed in *Access, Circulation, and Parking Plan*, below.

Arts and Humanities Building

The existing one-story Auditorium Building, built in 1956 and totaling approximately 11,851 square feet, would be renovated and modernized to establish a premier theater experience. The enhanced facility would be known as the Arts and Humanities Building. At full buildout, the existing Auditorium Building would be demolished and a new structure completed from the ground up. Interim development stages may focus on staged renovation and expansion of the Arts and Humanities Building, improving on the existing building footprint without demolition of the entire building.

Improvements to the Arts and Humanities Building would be accomplished through a series of enhancement projects. At a maximum, the existing Auditorium Building would be demolished and construction of a new 500-seat assembly area and classroom building (i.e., the Arts and Humanities Building) established in the same location. The new Arts and Humanities Building would not exceed 44,200 square feet and would be a maximum of three levels. New building levels would be integrated into the hillside slope so that the future roofline would be at an elevation similar to the existing roofline. For example, the lower level would be partially subterranean and an additional lower (bottom) level would be internal to the building and include the control room in the back of the assembly area. The facility would incorporate improved access to meet ADA accessibility requirements, along with fire-life safety upgrades throughout.

The Arts and Humanities Building would be approximately 65 feet in height. The new Arts and Humanities Building would not exceed the ground elevational height of the existing Auditorium Building.

Parking Lot F

A small surface parking lot (Lot F) currently consisting of 26 spaces in front of the current Auditorium Building would either be removed or reconfigured to accommodate the new building footprint for the Arts and Humanities Building.

Plan Area 3 (High School Building)

Plan Area 3 is in the vicinity of the existing High School Building and includes the parking area (Lot D) in front of the building, an access driveway along the eastern and northern edges, and a sloped area adjacent to the athletic field. Figure 3-7, *Conceptual Plan Area 3*, illustrates proposed uses and general building location at full buildout of Plan Area 3. The land use plan for this area is described below.

High School Building

Plan Area 3 improvements would include demolition of the west wing (approximately 5,070 square feet) of the existing one-story High School Building (built in 1952 and totaling approximately 19,200 square feet), followed by construction of a new two-story building section. The High School Building renovation would include an interior remodel within the remainder of the existing building, along with fire-life safety and accessibility upgrades throughout. When completed, the High School Building would total approximately 32,700 square feet, inclusive of the new 18,570-square-foot addition (net 13,500 square feet of new area).

The addition would be built to incorporate one level below-ground level. There would be no substantial change in the roof elevation from what currently exists because of the partial subterranean construction.

Parking Lot D

The existing surface parking lot (Lot D) immediately in front of the High School Building would be reconfigured to reduce the capacity from 69 current spaces existing to as few as 16 permanent stalls. The reduction in parking space in Lot D would allow for improved access and vehicle flow through reconfiguration of the driveway to accommodate bus turn-around and a student drop-off/pick-up area. The reconfigured Lot D would also incorporate courtyards and landscaping.

Temporary Portable Classrooms

During construction for Plan Areas 2 and 3, up to six portable classroom buildings may be temporarily placed on the existing soccer field at the western end of the campus to accommodate classroom space that would be affected during construction activity. The portable buildings would remain until completion and occupancy of newly constructed or renovated classroom areas.

Electrical Substation

The campus's existing substation is along the northern side of the High School Building. Electricity service enhancements are proposed as described under *Electrical Power Service*, including a new substation and service transfer connections. These facilities would be relocated within Plan Area 3.

Plan Area 4 (Palmerstone Property)

Plan Area 4 includes approximately 4 acres of unimproved property at the northern tip of the campus that is surrounded by Palmerstone Drive. The area currently has an organic garden. This area is intended for low-intensity development uses and offers an opportunity to substantially expand the campus recreational facilities. While the type of recreational facility would be determined in the future, contemplated improvements include tennis courts or an athletic field. This area would serve a dual function, initially as temporary and interim parking areas, with an active-use sports and recreation area improvement to be implemented later. Figure 3-8, *Conceptual Plan Area 4, Temporary Parking Use*, illustrates the proposed interim parking use in Plan Area 4. Figure 3-9, *Conceptual Plan Area 4, Tennis Courts Option*, and Figure 3-10, *Conceptual Plan Area 4, Athletic Field Option*, illustrate two conceptual recreational uses and designs for Plan Area 4. (See Figure 3-4 for the proposed ultimate use for recreation.) The land use plan for this area is described below.

Sport and Recreation Facilities

At its highest intensity, up to 2 acres would be improved with three tennis courts and a small accessory building for toilets and storage (approximately 920 square feet). A lower intensity option would be an open athletic field and sports concourse instead of the tennis courts.

Under either scenario, a new vehicular access would be established from Palmerstone Drive to the activity area, along with four or more parking stalls. Although nighttime lighting of the field or courts is not proposed, this area and pedestrian pathways leading to it would be lit with subdued lighting for safety and security purposes. An organic garden would continue to be maintained in Plan Area 4, but may be relocated. The perimeter of the tennis court/field area would be landscaped to screen and buffer this use area from the surrounding neighborhood.

Temporary and Interim Parking

Parking (Lot A) in Plan Area 4 is intended to serve as: (1) temporary construction worker parking, construction staging area, and equipment storage while construction is ongoing in other portions of the campus; (2) interim student, faculty, and visitor parking until a new parking structure in Plan Area 1 is established; (3) overflow parking during special events held at the FSHA campus; and (4) active outdoor sports use area (including tennis courts, athletic fields, or similar sport-related facilities). Temporary parking in Plan Area 4, accessed directly from Palmerstone Drive, would provide the deficit parking spaces needed to fulfill the parking requirements for the FSHA campus, but under no circumstances would more than 120 parking spaces be provided in Plan Area 4. For example, during construction of the parking structure in Plan Area 1, temporary parking would be accommodated in Plan Area 4. At full buildout, Lot A would be reduced in scale to function as ancillary parking for the adjacent recreational uses and overflow parking.

Construction Staging and Storage

During construction activities, the level pad of Plan Area 4 would be used for construction staging and temporary outdoor storage of construction materials and stockpiled soils/materials.

Plan Area 5 (Other Campus Facilities)

Plan Area 5 includes other campus areas in which very minimal improvements would be made, some of which would be temporary. During construction, additional portable classrooms may be located within this area (on the existing athletic field). To accommodate additional water pumps, the pump enclosure building may be expanded. Minor parking lot improvements (such as restriping) may occur in Parking Lots B and E.

Plan Area 6 (Natural/Undeveloped Areas)

Plan Area 6 (consisting of approximately 24 acres) would remain in the existing natural condition and would not be developed.

Total Development

Upon complete buildout of the proposed improvements set forth in the Specific Plan, the FSHA campus building development would total approximately 258,100 square feet, plus 99,000 square feet for a new parking structure.

Table 3-1 provides a summary of existing and proposed building square footage as described in the Specific Plan.

Table 3-1. Existing and Proposed Building Square Footage

Building Name	Current	Proposed	Net Change
Administration Building	126,969	126,969	—
Laundry Facility	2,589	2,589	—
Art Annex	3,641	3,641	—
Cottages 1 and 2	6,460	—	-6,460
Cottage 3	4,455	4,455	—
Cottage 4	3,583	3,583	—
Cottage 5	3,072	3,072	—
Cottage 6	2,337	2,337	—
Auditorium Building	11,851	—	-11,851
Arts and Humanities Building	—	44,200	44,200
High School	19,218	32,700	13,482
Student Activities Center	33,176	33,176	—
Toilet/Storage Building	—	920	920
Trash Enclosure	—	465	465
Total Building Area (excluding parking structure)	217,351	258,107	40,756
Parking Structure	—	99,000	99,000
Overall Total (including Parking Structure)	217,351	357,107	139,756

Note: New development square footage provided is approximate and may be slightly higher or lower. The overall total campus building area would not exceed 357,107 square feet at full buildout.

Access, Circulation, and Parking Plan

Vehicle Access and Local Circulation

Vehicular access to the FSHA campus is currently provided via three primary driveways on St. Katherine Drive: one driveway to the main upper campus High School Building (leading to parking Lots D and F), one driveway heading to Lot C, and one driveway leading to Lot B in front of the Administration Building. Upon buildout of the Specific Plan, two driveways would be added. A new driveway would be added to Plan Area 4 to access Lot A from Palmerstone Drive. An additional driveway would be added to Plan Area 1 and the existing driveway to that area would be reconfigured to accommodate access to the upper and lower level of the future parking structure.

Figure 3-11, *Site Circulation, Drop-off, and Parking Areas – Interim Plan*, and Figure 3-12, *Site Circulation, Drop-off, and Parking Areas – Buildout Plan*, show circulation and access to the campus.

Parking Facilities

The existing FSHA campus is served by series of surface parking lots (Lots B through F) spread throughout the grounds, totaling 197 spaces. During buildout of the Specific Plan, several of the lots would be reconfigured, replaced, or temporarily relocated as each Plan Area is developed. An

additional lot, Lot A, would be added to Plan Area 4. Prior to approval of any development plans, FSHA would provide a Parking Plan demonstrating accommodation of permanent parking related to the new development and to the overall campus. The Parking Plan would demonstrate that adequate interim parking would be provided while construction is ongoing.

Parking Lot A: Parking Lot A would be a new parking area established in Plan Area 4. Lot A would provide multiple functions, initially serving as a temporary lot for construction staging, construction worker parking, and student/faculty parking. Lot A would also serve as an interim parking area for event overflow and student parking until the Specific Plan is fully built out and a permanent parking structure established in Plan Area 1. Once sports uses are established in Plan Area 4, parking on Lot A would be substantially reduced to permanent parking levels appropriate to support the adjacent sports fields/tennis courts and overflow parking during peak uses on the campus. During its use as either temporary or interim parking, Lot A may be configured to include a student drop-off/pick-up area.

During construction of the parking structure in Plan Area 1, existing surface parking would be temporarily relocated to Lot A. Temporary parking in Plan Area 4, accessed from Palmerstone Drive, would provide the deficit parking spaces needed to fulfill the parking requirements for the FSHA campus during construction periods or peak use events and until the parking structure is completed.

Parking Lot B: Lot B is a surface parking lot adjacent to the entrance of the Administration Building. Currently, this lot provides 26 spaces.

Parking Lot C: Lot C is a surface parking lot that would continue to serve as parking in support of the campus uses. Parking could be temporarily suspended in Lot C during construction of Plan Areas 1 and 2. However, until such time that the parking structure is completed, Lot C would provide surface parking and a student drop-off/pick-up area.

Parking Lot D: Lot D is a surface parking lot immediately in front of the High School Building. Through buildout of the Specific Plan, Lot D would be reconfigured to reduce the parking from 69 existing spaces to as few as 16 permanent stalls. The reduction in parking space in Lot D would allow for reconfiguration of the driveway access to accommodate bus turnaround and a drop-off/pick-up area.

Parking Lot E: Lot E is a small surface parking lot adjacent to the entrance of the Student Activity Center and is currently limited to 2 spaces for ADA access and staff.

Parking Lot F: Lot F is a small surface parking lot consisting of 26 spaces in front of the current Auditorium Building. It would be removed or reconfigured to accommodate the new building footprint for the Arts and Humanities Building. Lot F would also be modified as appropriate in conjunction with adjustments to Lot D to accommodate bus and student drop-off/pick-up areas.

Student Drop-Off and Pick-Up

Circulation and drop-off improvements are proposed as part of the FSHA campus plan. Two student drop-off and pick-up areas are proposed on the campus so that vehicle queuing and roadway congestion along St. Katherine Drive can be avoided. (See Figures 3-11 and 3-12, above.) The two proposed locations for school drop-off and pick-up operations are the existing High School Building parking lot (Lot D) and the Plan Area 1 parking area (Lot C). An interim drop-off/pick-up area may be located in Lot A (in Plan Area 4) when that lot is utilized for interim parking.

Parents and students would be directed to a specific drop-off location based on their direction of arrival to access the campus. On-site queuing would be managed within the Plan Area 1 parking area, initially within the surface lot configuration and subsequently at the rooftop level of the future parking structure so that vehicles must drive to the far end of the parking facility allowing for maximum queue spacing. The drop-off plan would provide adequate queuing of vehicles at both the High School Building parking lot (Lot D) and lower parking lot (Lot C). Once the parking structure is completed, the rooftop level of the parking structure would serve as a drop-off and pick-up point for commuting students.

Proposed circulation and drop-off improvements are important design features of the campus plan intended to reduce queuing on St. Katherine Drive and improve student safety during school drop-off and pick-up periods.

Pedestrian Access and Orientation

A key objective of the proposed improvements is to enhance pedestrian access throughout the entire campus and to create walkable connections that would be safe, accessible, and functional. There would be a new pedestrian corridor between Plan Area 1 and the upper campus (Plan Areas 2 and 3) with seating and nooks to provide a park-like environment. A new pedestrian corridor between the parking structure and the High School Building would also be provided. New building and outdoor campus design would incorporate improvements for ADA-compliant walkways and pedestrian linkages (Figure 3-13, *Pedestrian Access Plan*).

Transportation Demand and Parking Management

FSHA currently implements a Transportation Demand Management (TDM) Program on a voluntary basis and would continue to implement the program. TDM is a general term for strategies that increase overall transportation system efficiency by decreasing the peak period traffic on roadways. The TDM Program would require FSHA to implement measures that would reduce FSHA-generated vehicle trips. TDM measures would include shifting from single-occupancy vehicle (SOV) trips to non-SOV modes, including mandatory carpooling and busing students to and from FSHA from off-site bus stops, thereby shifting auto trips out of peak periods. It is anticipated that the TDM Program would be reviewed each year and adjusted as necessary to meet the trip-reduction goals balanced with parking needs. A conceptual TDM Program is included as Appendix C to the Specific Plan.

Open Space and Recreation

Incorporated into the Specific Plan would be provisions for open space and recreational areas. Figure 3-14, *Open Space and Recreation Plan*, demonstrates how the open space areas would be integrated within the Specific Plan area.

The proposed land use and open space plans establish three categories of open space and recreation areas, as follows:

Open Space: Approximately 27.2 acres of open space are included in the Specific Plan. Open space area is planned on natural hillside and slope areas, including the entirety of Plan Area 6 (Natural/Undeveloped Areas) and slopes north of the existing campus. Open space area would be retained in its natural state to the extent feasible, but portions may be periodically maintained for brush clearance necessary to minimize wildfire hazards. When disturbed due to construction for adjacent buildings or infrastructure, natural open space areas would be revegetated with native

plant species compatible and/or appropriate with the adjacent natural plant communities and consistent with fuel modification zone requirements.

Passive Outdoor Recreation: Passive outdoor landscape and hardscape areas would be integrated throughout the FSHA campus, including gardens, the integrated trail and walkway network, and campus plaza areas. The garden nooks, reflection areas, and common plazas are intended to provide opportunities for outdoor enjoyment, socialization, and coordinated recreation within a secure environment of the campus. More than 2.3 acres of passive outdoor recreation area are provided in the Specific Plan. Figure 3-15, *Typical Gardens and Plazas*, shows a typical concept for outdoor garden area.

Active Outdoor Recreation: Dedicated areas for active outdoor recreational use would be established. These would include the existing athletic field (in Plan Area 5) west of the High School Building, and the future active use area in Plan Area 4. There is also a swimming pool west of the Administration Building, which serves as an active sports use area. Approximately 25 acres of active outdoor recreation area are provided in the Specific Plan.

Grading and Drainage Concept

Grading

All grading and soil export would be substantially consistent with conceptual plans in the Specific Plan and with the recommendations of a qualified geotechnical engineer with each new development project within the campus. Precise grading plans would be prepared at the time that final engineered plans for each new development project are reviewed and permitted. Precise earthwork volumes are not known at this time because the Specific Plan is conceptual and allows for flexible building design. The Grading Concept is intended to provide a framework for how grading would occur within the FSHA campus, identify performance standards and guidelines, and indicate the intended areas of disturbances (i.e., cut and fill locations). Estimated earthwork volumes would include:

Plan Area 1	12,300 cubic yards	Net Cut
Plan Area 2	15,000 cubic yards	Net Cut
Plan Area 3	4,900 cubic yards	Net Cut
Plan Area 4	12,900 cubic yards	Net Fill

The general grading strategy for the Specific Plan is that the current grade at building sites would be lowered or a portion of the building area would be incorporated into the hillside slope; this would minimize the elevation building height of new construction relative to surrounding properties and maintain perceived building heights consistent with elevations that currently exist on campus. Lowering of the building pads would also allow for the new development components to have a better connection with the street and pedestrian interface. Finally, because new structures and additions would be stepped into the hillside slope, development would retain the site topography and minimize the need for open-cut slopes and earth excavation.

A second grading strategy is to minimize the volume of grading and volume of export required to accommodate buildout of the Specific Plan development. This would be accomplished by utilizing hillside grading techniques that would step buildings into the hillside slope and minimize the need for extensive grade cuts. Also, to the extent feasible, cut earth would be utilized as fill within the

campus. The soil from the site excavation would be used as fill within Plan Area 4 to raise the overall pad elevation of this area 4 to 6 feet. The fill on Plan Area 4 would serve as the engineered base for improvements within this Plan Area and would be used to form the berms and landform features around the perimeter of the Plan Area. Fill would also be used to widen the service access road that leads around the High School Building to provide adequate width for emergency vehicle access.

Any cut earth not incorporated as fill would be hauled off site and disposed of at an appropriate facility. Consistent with the Preliminary Construction Program, discussed below, clean fill would not be disposed of directly at landfill sites but made available for reuse. Overall, site grading could require export of approximately 19,300 cubic yards of excess soil from the site. See Figure 3-16, *Conceptual Cut and Fill Areas*.

Chapter 9.14 of the LCF Municipal Code requires that development projects involving more than 2,000 square feet of building area prepare and implement a program to recycle and reuse construction debris in order to minimize disposal of waste in landfills. The grading plan would incorporate the reuse of excavated earth as fill for some portions of the campus development, thereby reducing the need for disposal of soils. Clean fill not otherwise placed on campus would be recycled for use off-site rather than disposed of in a landfill. Grading would also be completed utilizing best management practices (BMPs) for erosion control and low impact development.

Drainage

Water runoff would drain into LCF's existing collection system. The Specific Plan establishes a conceptual plan and guidelines for incorporation of storm water facilities and drainage planning that would support positive water quality, adequate collection system capacity, and avoidance of erosion and siltation. Because the Specific Plan provides flexibility for a range of development options, including the timing and sizing of physical improvements, detailed drainage and grading plans would be prepared to reflect actual conditions at the time of building permit application. However, no changes in the existing public drainage system are anticipated.

Development related to implementation of the Specific Plan would result in an overall increase of impervious area. The net increase would be minimized because, with the exception of new improvements within Plan Area 4 (Palmerstone Property), planned improvements would be limited primarily to areas with existing building coverage or paving. Regarding the extent to which each of these improvements would have the potential to increase storm flow, a preliminary hydrology report demonstrated that increased waterflow due to an increase in impervious surfaces on the campus would be accommodated through the storm water facilities plan.

An Standard Urban Storm Water Mitigation Plan (SUSMP) would be prepared, along with a grading and drainage plan, and submitted for review and approval along with development and building plans for each stage of improvement. The drainage plan would demonstrate utilization of BMPs for erosion control and low-impact development. The final drainage plan would demonstrate that net (i.e., post-development) run-off rates would not exceed the capacity of downstream stormwater facilities.

To ensure that storm water runoff impacts are minimized, development on the site would comply with the applicable standards of the National Pollutant Discharge Elimination System (NPDES) permit, including the use of BMPs related to the demolition, construction, and operational aspects of the development. In addition, on-site drainage facilities, consisting of small catch basins, bio swales, and pipes, would be incorporated into the grading design in accordance with LCF and Los Angeles

County requirements. The on-site system would convey the runoff to the existing streets or to the existing drainage systems.

Infrastructure, Utilities and Services

Water Service and Fire Flow

Fire protection service is provided by the Los Angeles County Fire Department. Implementation of the Specific Plan would require water service upgrades to establish sufficient water service and pressure to meet the fire flow requirements of the Los Angeles County Fire Department. To ensure a safe environment that meets fire flow requirements, implementation of the Specific Plan would include additional hydrants and pumps supplied by the on-site fire service line. Figure 3-17, *Water Service Plan*, shows the water system enhancements required for implementation of the Specific Plan development.

Fire Protection, Fire Flow, and Fire Suppression System

In addition to water service upgrades for adequate fire flow pressure, implementation of the campus plan would include an enhanced on-site fire suppression system that would facilitate the Fire Department's ability to respond to emergencies.

The new fire suppression system would consist of both publicly maintained (by the Water District) and privately maintained (by the FSHA) components. Because of the larger parcel size and locations of buildings interior to the lot, it would be necessary to implement a privately maintained fire suppression system that would provide for hydrants and firefighting support facilities in key areas of the campus (as coordinated with the Los Angeles County Fire Department).

A minimum of two (and potentially up to four) privately maintained fire hydrants would be added to the campus, which already has three public hydrants along St. Katherine Drive and two public hydrants along Palmerstone Drive. Figure 3-18, *Fire Suppression System Plan*, shows the fire suppression system, including location of on-campus fire hydrants that would be required for implementation of the Specific Plan development.

In addition, all new buildings and all major renovations would be fully sprinklered in accordance with the current fire code.

Fire flow and fire service requirements would be addressed in two stages. Stage one fire service enhancements would involve establishing a new 4-inch (high-pressure) water line connection from an existing 6-inch (high-pressure) water line in Wendover Road, which would cross St. Katherine Drive and enter the upper FSHA campus to support building sprinkler systems and enhance fire flow serving existing development on campus. Stage one fire service enhancements through the 4-inch water line would be used as an interim safety net to support fire sprinkler installation within the existing Arts and Humanities Building.

Stage two fire service enhancements would involve implementation of a system of privately installed water pumps and fire hydrants throughout the campus to establish adequate fire flow pressure and an internal distribution network for fire flow within the campus grounds. Stage two fire service enhancements would be implemented when there is a substantial net increase in campus building square footage. Stage two improvements would include installation of a minimum of two fire pumps (to be located at the existing pump house west of the Student Activity Center) and

placement of a minimum of four new fire hydrants throughout the campus grounds. Location of the fire hydrants would be coordinated with the Los Angeles County Fire Department to ensure that their placement meets criteria for access and building proximity. This fire service system would be privately supported and maintained by FSHA.

Emergency Access

Emergency vehicles would access the campus buildings primarily from St. Katherine Drive. The Administration Building is accessible directly from St. Katherine Drive, as is the current Parking Lot C (and future parking structure) across from the Administrative Building. Other upper campus buildings are accessible from the main driveway leading to the Arts and Humanities Building, High School Building, and Student Activity Center. Cottages 1 through 6, which are built on the slope behind the Arts and Humanities Building, are indirectly accessible from the upper campus lots and the Lot C parking area.

As improvements within the upper campus are implemented, the drive aisle within Parking Lots D and F would be reconfigured and widened to 26 feet to accommodate emergency vehicles and allow for their ability to turn around within the upper lot area.

The existing service access road that extends from the southeastern corner of the High School Building counterclockwise to the northern end of the building would be improved to a finished width of 20 feet to accommodate emergency fire response vehicles. Implementation of the emergency access road would require that small sections of retaining walls be installed down-slope of the existing road so that these areas may be backfilled and the roadway widened.

Final placement and sizing of the retaining walls for the emergency access road would be determined through recommendations of a geotechnical report and the final grading plan. The access road around the back of the High School Building would be designed so that retaining walls would be limited to a maximum height of 15 feet.

Wildfire Prevention and Fuel Modification Management

The conceptual landscape plan incorporates a plant palette of drought-tolerant and native species that would reduce water usage and serve as a sufficient buffer between campus development areas and surrounding native vegetation and brush. The plant palette conforms to the requirements of the Los Angeles Fire Department Fuel Modification Plan Guidelines.

Electrical Power Service

Electrical service is provided by Southern California Edison (SCE). There is sufficient access to power at FSHA to meet existing operational demand. However, implementation of building improvements would require that the electrical service system be upgraded to accommodate the larger electrical load necessary to operate the pumping system for fire service and fire suppression. To meet this demand, a higher capacity 16-kilovolt (kV) service line would be required to provide adequate electrical service to the campus. To accommodate the new service, the existing point of transfer and substation facilities would be modified.

SCE has identified the preferred route for extending a 16-kV service line to campus. The new route would require relocation of the campus transfer point from the southeastern corner of the High School Building to the northern side of the building. At the same time, on-site electrical service facility components, including the substation, would be relocated.

Figure 3-19, *Electrical Service Connections*, shows the existing and proposed components of the electrical service infrastructure on the campus that would be required for implementation of the Specific Plan development.

The electrical service improvements would be implemented prior to occupancy of any new or major renovation construction that would trigger the need for the expanded fire suppression system.

Southern California Edison Off-Site Improvements

To accommodate a request from FSHA for a new 16-kV distribution line to provide power to the new fire pumps that would be installed as part of the Specific Plan, SCE would need to modify approximately 0.7 mile of its existing 66-kV subtransmission line in the vicinity of the school. Such modifications may require the replacement of up to 13 poles for the existing 66-kV subtransmission poles with taller and/or wind-load-rated poles in order to accommodate the installation of the 16-kV circuit.² In addition, two new distribution poles would be installed and three existing distribution poles would be removed. Construction of the proposed project would require temporary disturbances, including vegetation clearing and/or grading at some or all of the pole sites to develop work pads and/or laydown areas. Temporary wire-stringing sites and helicopter laydown yards may also be required as part of the project. Proposed work areas would range from 100 feet by 100 feet to 150 feet by 150 feet.

SCE's existing 66-kV subtransmission line, with which the new 16-kV distribution line would be co-located, would extend from an existing wooden H-frame structure on the northern side of Interstate 210, cross the freeway and Highland Drive, and then head in a southwesterly direction up the hills toward FSHA, ending near the northwestern corner of the FSHA sports field south of Palmerstone Drive. Figure 3-20, *SCE Off-site Improvements*, shows the conceptual location of the proposed SCE facilities.

Development Regulations and Standards

The development regulations and standards in the proposed Specific Plan would ensure that development of the FSHA campus would be consistent with the LCF General Plan and Zoning Ordinance. Through adoption of the Specific Plan, the entire FSHA campus would be rezoned to Flintridge Sacred Heart Specific Plan (FSHA-SP), and all zoning and development regulations pertaining to future improvements on the FSHA campus would be consolidated and contained within the Specific Plan, which would take precedence over other development standards in the LCF Zoning Ordinance that previously regulated the property. Upon approval of the project, the Specific Plan would serve as the land use and zoning document that would dictate zoning and development regulations and standards for the FSHA property. General provisions described in the proposed Specific Plan include requirements for the inclusion of geotechnical investigations as part of the grading permit process, regulation of special event permits granted at the FSHA campus, a provision regarding natural disaster-related casualties to buildings, and the establishment of exterior lighting and signage approved under the Specific Plan.

² SCE may replace a pole or poles during its normal course of operations for reasons unrelated to the FSHA project. For example, if deterioration is identified through SCE's inspection and maintenance program, or if a safety issue is identified, SCE may need to replace poles separate from the FSHA project. These replacements are not analyzed in this EIR.

In addition to its general provisions, the proposed Specific Plan would establish operational standards for development at the FSHA campus, including the plan area development improvements set forth within the Specific Plan and any other future improvements. Generally, existing heights and setbacks would be maintained under the Specific Plan, with an increase in building height for the proposed Arts and Humanities Building (although the maximum rooftop elevation would not increase). All new buildings would be required to maintain a 15-foot setback from the outer edge of the Specific Plan boundary and a 10-foot setback from St. Katherine Drive, and the gross floor area of the campus (inclusive of the parking structure) would be capped and would not exceed 360,000 square feet. Requirements for the proposed tennis courts would include 15-foot setbacks from the property line, fencing, lighting, and landscaping. The development regulations would also include restrictions regarding buildings or structures that would need to be moved, along with plans for temporary housing, in the event of damage to on-campus housing after a natural disaster.

The proposed Specific Plan provides additional operational regulations and limitations, including a student enrollment cap of 425. Other operational regulations include requirements for a temporary use permit for special events, preservation of all buildings designed by Myron Hunt, conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, limitations for on-site restroom use (within Plan Area 4), limitations on special events at the campus, and limitations on amplified sound systems. Other regulations and standards outlined in the proposed Specific Plan include the establishment of authorized land uses, campus hours of operation, student parking provisions, a community liaison system, and an emergency response plan.

On-Campus Events

A number of on-campus FSHA events, including religious and spiritual assemblies, student programs and theater productions, sports events in the gymnasium, high school commencement, parent/student events, and other similar events and programs that are associated with routine operation of a school, are held at the campus. In addition, FSHA periodically hosts events such as fundraisers, retreats, community celebrations, or training events that are not essential to the daily operation of the school and student activities but are associated with FSHA's objectives and its relationship within the community.

The Specific Plan defines a "Regular Event" as a scheduled and promoted activity occurring on the campus at a specific date for a specific purpose tied to the operation and administration of FSHA. A "Minor" Regular Event is a routine, regular, or typical calendared school event. A "Major" Regular Event is a routine, regular, or typical calendared school event that is anticipated to attract more than 500 people to the FSHA campus, and that typically occurs during non-school hours. Major Regular Events would occur no more than 12 times per year, but no more than two such events would occur per month.

A "Special Event" is an activity or event, typically expected to attract more than 100 people to the FSHA campus and during non-school hours, involving the commercial or third-party rental, lease, or paid use of the FSHA facilities for a scheduled and promoted activity at FSHA occurring on a specific date for a specific purpose by anyone other than FSHA or FSHA-related organizations. The Specific Plan limits Special Events to no more than 12 events a year, with no more than two such events per month.

Design Guidelines

The proposed Specific Plan describes the design guidelines for all future development on the campus. It is intended not only to guide the design of new structures and improvements proposed in the anticipated development plan but also to guide the community development director regarding determinations on any future changes to the campus not contemplated as part of the Specific Plan. A key feature of the design guidelines involves preserving the existing character of the campus as an example of Myron Hunt's architecture and Spanish Eclectic design. With this intent in mind, the guidelines require specific design criteria for architectural elements, building form and mass, materials and color, doors and windows, roofs, walls and fencing, paving, and furnishings. Similarly, the landscape guidelines have been developed with a plant materials palette that is consistent with the original design of the FSHA campus.

In addition to architectural elements, the design guidelines include a discussion of site planning for the proposed development and improvements. Buildings would be designed to be compatible with existing buildings, landscapes, open space, heights, mass, and bulk. Furthermore, main entrances to newly developed buildings should be oriented toward plazas or parking lots. All temporary parking areas established during construction of the FSHA campus improvements (i.e., Plan Areas 1 through 4) would be restored to their prior condition if not otherwise developed with campus improvements as set forth in the Specific Plan. Trash enclosures would be screened and designed to be compatible with existing architecture. Finally, the lighting design is generally intended for wayfinding and safety. Lighting fixtures would complement the style of the existing campus architecture and be directed downward to limit light pollution or overspill. Safety and security lighting is intended to operate from dusk to dawn. All new exterior lighting would be subdued.

3.4.2 Construction Activities

Specific Plan Development

The Specific Plan proposes physical development improvements within four of the six Plan Areas. Improvements to the FSHA campus are expected to begin in late 2014 and be implemented over an estimated 15-year period. The Specific Plan does not specify an order for buildout of project improvements. Development may occur in any order determined by FSHA provided that the provisions for parking and limitations on temporary uses are consistently met.

Under no circumstances would more than a single major improvement project be under development at one time. It is anticipated that operation of FSHA would continue throughout construction by using temporary structures when necessary. The construction phasing plan outlined below is an approximation of the construction activity and operational characteristics and is based on an aggressive development schedule, which is assumed for purposes of this EIR analysis to represent the "worst-case" construction scenario that could be anticipated. In general, construction activity would be limited to the hours between 7 a.m. and 6 p.m.; however, truck haul trips would be limited to the hours between 8 a.m. and 3:30 p.m. to minimize the potential for conflicts with traffic on local residential streets.

The plan and design of each stage of construction would address construction issues such as drainage, storm water management, utilities, and parking. The Specific Plan does not have an expiration period and it would remain in effect until otherwise repealed or the FSHA campus use ceases to exist.

Plan Area 1

Development of Plan Area 1 is anticipated to take 9 months and would include the construction of the new parking structure, which would be in the existing Lot C. A temporary parking area at the northern end of the campus, accessed from Palmerstone Drive, would be used to address the parking needs of the campus during construction of Plan Areas 1 through 3. During construction of Plan Area 1, approximately 690 cubic yards of debris from demolition and site-clearing activity would be generated and hauled to an off-site disposal facility. Excavation required for the new parking structure would result in approximately 12,300 cubic yards of soil being hauled to Plan Area 4 and used as fill material to raise the elevation of that area by approximately 4 feet in preparation of future Plan Area 4 improvements. Temporary lane closures may be required intermittently throughout this stage to allow for the delivery of materials and the movement of haul trucks, which would be transporting excavated material to the Palmerstone Drive property. A Construction Management Plan would be prepared and provided to the LCF engineer for review and approval prior to the initiation of any construction activity. The Construction Management Plan would be required to address the management of construction vehicles on local roadways, including the use of a flagman to assist with the management of construction vehicles.

Plan Area 2

Development of Plan Area 2 is anticipated to take 18 months and would include the demolition of the Cottage 1 and 2 building and the Auditorium Building. Portable buildings would be constructed on the existing soccer field to accommodate classroom uses. Construction would include a new outdoor terraced garden with bridges and potentially elevators, which would meet ADA access requirements, a new Arts and Humanities Building, and a trash enclosure. Removal of demolition debris would require approximately 114 truckloads of debris to be hauled over a 10-day period; flagmen and warning signage would be used along St. Katherine Drive and adjacent streets. However, no lane closures are anticipated. Excavation of this Plan Area would generate approximately 15,000 cubic yards of soil, a portion of which would be reused to backfill the basement of the demolished Cottage 1 and 2 building. The export of excavation material would require approximately 11 days for hauling.

Plan Area 3

Development Plan Area 3 is anticipated to take 12 months and would include demolition of the west wing of the one-story High School Building, construction of a new two-story wing, interior remodeling of the remainder of the High School Building, and redesign work for the existing surface parking lot in front of the High School Building. Portable buildings (a maximum of six) on the athletic field would remain and be used during Plan Area 3 construction to accommodate classroom uses. Demolition work would require approximately 145 truckloads of debris to be hauled over a 10-day period. Flagmen and warning signage would be used to control traffic flow along St. Katherine Drive; however, no lane closures are anticipated. Excavation would generate approximately 4,900 cubic yards of soil, which would be exported, requiring approximately 4 days of off-site truck hauling.

Plan Area 4

Development of Plan Area 4 is anticipated to take 7 months and would include development of the property at the northern end of the campus, which is surrounded by Palmerstone Drive. During

development of this area, the temporary parking lot used during construction of Plan Areas 1 through 3 would be removed, and the area would be improved with an organic garden, athletic/recreational active-use facilities, a small parking area, and a small building with toilets and storage. The athletic practice area may consist of either a practice field or three tennis courts. Generally, demolition would consist of only minor site clearing; minor amounts of soil would be exported during construction of this Plan Area. Because the fill import requirements for this area would have been handled during construction of Plan Area 1, haul truck activity during construction of this Plan Area would be minimal. Up to 12,900 cubic yards of fill derived from construction of Plan Areas 1 through 3 may be placed within Plan Area 4 and incorporated into the final finished grade.

SCE Off-Site Improvements

Pole replacement construction activities are anticipated to be completed over an approximately 8- to 12-week period. Where feasible, the subtransmission structure pad locations and temporary laydown/work areas would first be graded and/or cleared of vegetation as required to provide a reasonably level and vegetation-free surface for structure installation. Sites would be graded such that water would run toward the direction of the natural drainage. In addition, drainage would be designed to prevent ponding and erosive water flows that could damage the structure footings. The graded area would be capable of supporting heavy vehicular traffic.

Erection of the structures may also require the establishment of a temporary crane pad if a crane will be required for the installation of certain poles or structures. The crane pad would occupy an area of approximately 100 feet by 100 feet and would be adjacent to each applicable structure within the laydown/work area used for structure assembly.

The pad may be cleared of vegetation and/or graded as necessary to provide a level surface for crane operation. The decision to use a separate crane pad would be determined during final engineering and the selection of the appropriate construction methods to be used by SCE or its contractor.

Some structures may need to be installed by helicopter due to inaccessibility of terrain. Landing zones and helicopter flight paths would be developed once final engineering was received.

Light-Weight Steel and Fiber-Reinforced Composite Pole Installation

Each light-weight steel (LWS) or fiber-reinforced composite (FRC) pole would require a hole to be excavated using an auger, a backhoe, or by hand digging. Excavated material would be used as described in under *Reusable, Recyclable, and Waste Material Management*, below. LWS and FRC poles consist of separate base and top sections and may be placed in temporary laydown areas at each pole location. Depending on conditions at the time of construction, the top sections may come pre-configured, may be configured on the ground, or may be configured after pole installation with the necessary cross arms, insulators, and wire-stringing hardware. The LWS poles would then be installed in the holes, typically by a line truck with an attached boom. When the base section is secured, the top section would be installed on top of it.

Depending on the terrain and available equipment, the pole sections could also be assembled into a complete structure on the ground prior to setting the poles in place within the holes.

Wood Pole Installation

Each wood pole would require a hole to be excavated using an auger or backhoe, or by hand digging. Excavated material would be used as described in under *Reusable, Recyclable, and Waste Material Management*, below. The wood poles would be placed in temporary laydown areas at each pole location. While on the ground, the wood poles may be configured with the necessary cross arms, insulators, and wire-stringing hardware before being set in place. The wood poles would then be installed in the holes, typically by a line truck with an attached boom.

Tubular Steel Pole Installation

Each tubular steel pole (TSP) would require a drilled, poured-in-place, concrete footing that would form the structure foundation. The hole would be drilled using truck or track-mounted excavators. Following excavation of the foundation footings, steel-reinforced cages would be set, survey positioning would be verified, and concrete would then be poured. Foundations in soft or loose soil, or that extend below the groundwater level, may be stabilized with drilling mud slurry. In this instance, mud slurry would be placed in the hole after drilling to prevent the sidewalls from sloughing. Concrete would then be pumped to the bottom of the hole, displacing the mud slurry. Depending on site conditions, the mud slurry brought to the surface would typically be collected in a pit adjacent to the foundation or vacuumed into a truck, and then pumped out to be reused or discarded at an appropriate off-site disposal facility.

TSPs consist of separate base and top sections. The pole sections would be placed in temporary laydown areas at each pole location. Depending on conditions at the time of construction, the top sections may come pre-configured, be configured on the ground, or be configured after pole installation with the necessary cross arms, insulators, and wire-stringing hardware. A crane would then be used to set each steel pole base section on top of the previously prepared foundations. If existing terrain around the TSP location is not suitable to support crane activities, a temporary crane pad would be constructed within the laydown area. When the base section is secured, the top section of the TSP would be set into place onto the base section and the two sections would be slipped or bolted together. The two sections may also be spot-welded together for additional stability. Depending on the terrain and available equipment, the pole sections could also be pre-assembled into a complete structure prior to setting the poles.

Guying and Guy Poles

Some of the existing LWS and wood poles currently are supported by guy poles or guy wires. Guying consists of a guy wire (down guy) attached to a buried anchor or, when there is not adequate space for the required down guy, a shorter guy pole (stub pole) is typically placed with a down guy and buried in a location that has sufficient room for these facilities. Until further design and engineering is completed by SCE, it is unknown which new poles may require guys to be installed. However, for purposes of disclosure, some new poles may require guy wires or guy poles for support.

Temporary Guard Structures

Guard structures are temporary facilities that may be installed at transportation, flood control, and utility crossings for wire-stringing/removal activities. These structures are designed to stop the movement of a conductor should it momentarily drop below a conventional stringing height. If used, guard structures would be temporarily installed on each side of all public road crossings and where

installation of the 66-kV subtransmission line would cross other utilities along the route. Guard structures could also be temporarily installed on each side of driveways and private roads that are crossed, where necessary. Guard structures would be constructed on site using wood poles and then removed after construction is complete. In some cases, guard structures could be substituted with the use of specifically equipped boom trucks, which would already be utilized at the site for general construction activities. The ultimate decision as to the use of guard structures or boom trucks would be at the time of construction.

Transfer of Existing 66-kV Conductor

After a pole is constructed, the existing 66-kV conductor would be removed from the old structure and transferred to the new. This work would be accomplished with the same equipment that set the structure.

Removal of Existing Poles

Once the above work has been completed on the 66-kV subtransmission line, SCE would return to remove the existing pole stubs and backfill the old holes with compacted native soil. In addition, for the distribution poles that would be removed east of the FSHA campus, SCE would backfill the old holes with compacted native soil.

Installation of Fault Return Conductor

Although LWS poles are earth-grounded structures, a fault return conductor could potentially be installed on the new 66-kV subtransmission LWS poles. This conductor would electrically ground the LWS poles and is typically buried 4 to 6 feet below the distribution facilities.

Installation of 16-kV Distribution Conductor

Once the new 66-kV subtransmission poles are erected, SCE would install the new 16-kV distribution line to serve the FSHA campus. Standard installation to string the new distribution circuit would involve the use of equipment such as boom trucks and wire-stringing dollies.

Traffic Control Plan

SCE would work closely with LCF on a traffic control plan, since the SCE construction activities may require lane closures, pedestrian traffic control, and parking restrictions for the protection of the public as well as employees, and to accommodate staging of SCE trucks and equipment. SCE would also work with Caltrans to secure the necessary crossing permits related to stringing and other work across Interstate 210.

Temporary Disruption of Electrical Service

SCE anticipates that work on the distribution system conducted as part of this relocation could require short-term service disruptions to customers. SCE would follow its standard procedures for planned outages and notify affected customers in advance. LCF would also be notified through SCE's existing outage notification procedures.

Reusable, Recyclable, and Waste Material Management

Construction of the SCE scope of work would result in the generation of various waste materials, including wood, metal, soil, vegetation, and sanitation waste (portable toilets). Sanitation waste (i.e., human-generated waste) would be disposed of in accordance with sanitation waste management practices. Material from existing infrastructure that would be removed, such as conductor, steel, and debris, would be temporarily stored at SCE's Monrovia Service Center and/or transported to appropriate SCE facilities for later disposal.

The removed wood poles would be returned to appropriate SCE facilities and either reused by SCE, returned to the manufacturer, disposed of in a Class I hazardous waste landfill, or disposed of in the lined portion of a Regional Water Quality Control Board-certified municipal landfill.

Material excavated would be used as backfill for other project elements, made available for use by the landowner, or disposed of off site at an appropriately licensed waste facility. If contaminated material is encountered during excavation, work would stop at that location and SCE's Spill Response Coordinator would be called to the site to make an assessment and, if necessary, notify the proper authorities.

Other hazardous construction materials, if present, would be stored, handled, and used in accordance with applicable regulations. Material Safety Data Sheets would be available at the construction site for all crew workers.

3.5 Project Approvals and Intended Uses of the EIR

This draft EIR, as defined by Section 15161 of the State CEQA Guidelines, serves as an informational document for the general public and the project's decision-makers. LCF has the principal responsibility for approving the proposed project and, as the lead agency, is responsible for preparation and distribution of this draft EIR pursuant to State CEQA Guidelines Section 21067. This draft EIR shall be used in connection with all other permits and all other approvals necessary for construction and operation of the proposed project. This draft EIR will be used by LCF, the City of Pasadena, and other responsible public agencies that must approve activities undertaken with respect to the project.

Implementation of the proposed project would require the following discretionary actions and permits from LCF and other government bodies and agencies:

- Certification of an Environmental Impact Report
- General Plan Amendment—FSHA Specific Plan
- Zone Change—FSHA Specific Plan Overlay Zone
- Pre-Zone (Annexation)—24.13 acres, FSHA Specific Plan
- Sphere of Influence Amendment (Annexation)—24.13 acres
- Resolution of Annexation
- Resolution of Detachment—24.13 acres, FSHA property (City of Pasadena)
- Annexation Approval—24.13 acres, FSHA property (Los Angeles County Local Agency Formation Commission)

3.6 Cumulative Projects

CEQA requires that an EIR evaluate a project's cumulative impacts. Cumulative impacts are the project's impacts combined with the impacts of other related past, present, and reasonably foreseeable future projects. As set forth in the State CEQA Guidelines, the discussion of cumulative impacts must reflect the severity of the impacts along with the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA, Title 14, Section 21083(b), "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable."

According to the State CEQA Guidelines:

The term "cumulative impacts" refers to two or more individual effects that, when considered together, are considerable and compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Section 15355).

In addition, as noted in the State CEQA Guidelines, the "mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable" (CCR, Title 14, Division 6, Chapter 3, Section 15064(I)(5)).

Cumulative impact discussions for each environmental topic area are provided at the end of each technical analysis contained within Chapter 4, under *Impacts and Mitigation Measures*. As previously stated and as set forth in the State CEQA Guidelines, related projects consist of closely related past, present, and reasonable foreseeable probable future projects that would most likely result in similar impacts and be in the same geographic area (CCR, Title 14, Division 6, Chapter 3, Section 15355). A review of LCF, City of Pasadena, and California Department of Transportation (Caltrans) records indicated a few projects within the immediate area (5 miles or closer) that may result in significant impacts on the environment. The cumulative analysis considers the potential cumulative impacts from constructing these projects and addresses the proposed project's contribution to probable cumulative effects to determine if the proposed project's contribution would be cumulatively considerable.

Table 3-2. Projects Considered in Cumulative Impacts Analysis

Project Name	Jurisdiction	Description	Status
Improvement of Chevy Chase Drive at Figueroa Street	LCF	Roadway improvement to construct a raised landscaped median to replace plastic traffic markers.	Completed
Foothill Freeway (I-210) Congestion Relief Project	Multiple Lead Agency: Caltrans	New on-ramp meters, freeway-to-freeway connector meters, high-occupancy vehicle bypass lanes	Approved; under construction

Project Name	Jurisdiction	Description	Status
Hahamongna Multi-Benefit/Multi-Use Project	Pasadena	Four capital improvement projects on the western edge of Hahamongna Watershed Park: Westside Perimeter Trail, Sycamore Grove Field, Berkshire Creek Project; and habitat restoration along the western edge of Devil's Gate Basin	CEQA pending
Sunset Overlook: A Project of the Arroyo Seco	Pasadena	Cleanup and restoration project, additional seating and interpretive signage, minor work to existing Windsor/Ventura parking lot	Approved; under construction

