

# MEMORANDUM

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To: Dave Rand  
Armbruster Goldsmith & Delvac LLP

Date: September 23, 2020

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From: David S. Shender, P.E.  
Linscott, Law & Greenspan, Engineers

LLG Ref: 5-20-0518-1

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Subject: **Parking Study for the Proposed Residential Project at 12850 Crenshaw Boulevard**  
City of Gardena

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This memorandum has been prepared by Linscott, Law & Greenspan, Engineers (LLG) to provide a comprehensive parking study related to the proposed residential project at 12850 Crenshaw Boulevard in the City of Gardena (“the Project”). The Project proposes the development of 265 multi-family residential units. A total of 267 vehicle parking spaces are proposed to be provided on-site. A Specific Plan is proposed to regulate development at the Project site.

The Project site is located approximately two-thirds of a mile walking distance to the nearby Metro Green Line station. As such, the Project site is located adjacent to a Transit Priority Area<sup>1</sup> (TPA) as defined by the Southern California Association of Governments (SCAG). In addition, many of the Project residents are expected to be employed at nearby businesses, including the SpaceX facility located across El Segundo Boulevard from the Project site. The proposed Specific Plan includes a Transportation Demand Management (TDM) Plan. To reduce vehicular trips and on-site parking demands, the TDM Plan requires an exclusive 30-day pre-leasing period targeted for employees who work within a one-half mile radius of the Project Site (e.g., SpaceX).

The Specific Plan’s proposes two development standards related to off-street parking that differ from the Gardena Municipal Code:

- Number of Parking Spaces Required (Section 18.40.040). The Project proposes to provide parking at a rate that differs from those defined by Section 18.40.040 of the Gardena Municipal Code. As the characteristics of the Specific Plan are unique to the Project, it is anticipated that parking demand will be less than the rates established by Section 18.40.040. The parking analysis has been prepared to evaluate the proposed parking for the Project using Specific Plan parking rates. Details of the parking demand analysis prepared for the Project are provided in a following section.

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<sup>1</sup> A TPA is defined the area located within one-half mile of major transit stops, including an existing rail transit station.

- Size of Parking Spaces (Section 18.40.050). The Project proposes dimensions related to the parking area that differ from Section 18.40.050 of the Gardena Municipal Code. The width of the parcel on which the Project is located makes it impractical to provide parking lot dimensions that comply with the Gardena Municipal Code. The dimensions proposed for the Specific Plan, however, are consistent with parking design standards utilized by other jurisdictions and, therefore are considered to be safe and efficient as described in a following section.

## Project Description

The Project consists of a residential development featuring 265 apartment units. A total of 267 vehicle parking spaces are proposed to be provided on-site. Specific components of the Project development plan are as follows:

- Residential with 265 units:
  - 95 Studio apartments
  - 132 1-bedroom units
  - 38 2-bedroom units

## Specific Plan Parking Calculation

As previously noted, the Project is proposed to be developed as part of a Specific Plan and proposes off-street parking rates differing from those defined in the Municipal Code. For example, the Section 18.40.040 of the Gardena Municipal Code requires two parking spaces per each unit (i.e., studio units, 1-bedroom units, and 2-bedroom units). The Specific Plan proposes one parking space for each unit (i.e., studio units, 1-bedroom units, and 2-bedroom units). In addition to the 265 parking spaces for the residential units, the Project will provide two (2) additional parking spaces that would serve leasing, mail, and shared ride use (e.g., Uber/Lyft).<sup>2</sup>

## Transportation Demand Management

The Specific Plan includes a TDM Plan to reduce single-occupant automobile travel and take advantage of the Project site's proximity to large employment centers, transit services, and bicycle and pedestrian facilities.

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<sup>2</sup> It is noted that additional parking spaces would be available as-needed on-site for daytime use by other non-resident vehicles such as the on-site manager, maintenance/contractors, etc. because: 1) not every resident will choose to rent a parking space; and 2) parking spaces will be available during the day as some residents are at work or school.

TDM measures include the following:

**Pre-Leasing for Area Employees.** Residential units within the Specific Plan area shall be marketed exclusively for a thirty-day period to employees working within a one-mile radius of the development, before the units are offered for rent to the general public. The developer shall submit a pre-leasing marketing plan to the Director of Community Development for review and approval prior to issuance of a temporary certificate of occupancy. The developer must then demonstrate compliance with the approved thirty-day exclusive marketing plan prior to issuance of a final certificate of occupancy.

**Transit Information.** To ensure that residential tenants and guests are aware of transit options and TDM programs available to them, an information board or kiosk shall be posted in a central location within the Specific Plan area.

**One-time Free Monthly Transit Pass.** Given the Specific Plan area's location within walking distance (approximately two-thirds of a mile) to the Crenshaw Station, the developer shall offer future residents who commence a 12-month lease a one-time monthly Metro transit pass. These one-time monthly transit passes shall be offered to new residents for a 24-month period ("Free Pass Period") commencing after issuance of any temporary or final certificate of occupancy. The Developer shall demonstrate compliance with this requirement to the satisfaction of the Director of Community Development. In the event the Director of Community Development determines the developer failed to satisfy this requirement, the developer shall be given seven days to demonstrate compliance ("Cure Period"). In the event the developer fails to demonstrate compliance during the Cure Period, the City may extend the Free Pass Period by one week for each resident denied a Metro transit pass. This would encourage and help facilitate a culture of transit use by Project residents.

**Unbundled Parking.** The Specific Plan requires that the rent for a parking space at the Project be charged separate from the rent of the residential unit. This unbundling of the charge for a parking space brings visibility to the cost of vehicle ownership and allows residents to choose between renting a parking space or using a portion of these funds for other uses, such as purchasing a transit pass and/or maintaining a bicycle. Residents who choose to not rent a parking space must commit in their leases that they will not park a personal vehicle at the Project site or nearby area.

**On-site Residential Bicycle Parking.** The Specific Plan requires one (1) bicycle parking space per residential unit (located in secured facilities accessible only by residents). All bicycle parking shall be located in a safe, convenient location, encouraging the use of bicycle transportation by residents and residential guests.

**Ride-Sharing Pick-Up/Drop-Off.** A designated loading zone within the Specific Plan area shall be signed and distinguished (e.g., with paving and/or paint) so that it is utilized as pick-up and drop-off zones for ride-sharing services.

### **Transit Oriented Development Parking Demand Research**

As previously noted, the Project proposes to provide off-street parking based on the rate established as part of a Specific Plan. It is anticipated that many of the Project's residents will be employed at nearby businesses and/or utilize transit options in the area, including the Metro Green Line. As stated above, the Specific Plan TDM Plan requires an exclusive 30-day pre-leasing period targeted for employees who work within a one-half mile radius of the Project Site (e.g., SpaceX employees). As this development is transit-oriented, a parking rate providing fewer spaces than those established in the Municipal Code is proposed. Parking demand research for Transit Oriented Developments ("TODs") was conducted as part of this parking review and is summarized in the following paragraphs.

#### *TOD Letters in Support of Reduced Parking and TDM*

LLG understands the City of Gardena will prepare a Draft Environmental Impact Report (Draft EIR) for the Specific Plan. In conjunction with the preparation of the Draft EIR, the City recently issued a Notice of Preparation to affected government agencies and nearby stakeholders. In response, the City has received two letters from government agencies in support of reduced parking for the Specific Plan based on the TOD aspect of the Project.

Caltrans submitted a letter in response to the NOP to the City<sup>3</sup> in support of the TOD nature of Project, including the statement, "Caltrans acknowledges and supports infill development that prioritizes nearby transit service, promotes active transportation, and provides a mixture of land uses that keep the goods and services people need in close proximity to where they work and live." Further the Caltrans letter supports reduced on-site parking for TOD projects including, "Caltrans still recommends reducing the total amount of parking whenever possible, as research on parking suggests that abundant parking enables and encourages driving. Research looking at the relationship between land-use, parking, and transportation indicates that the amount of car parking supplied can undermine a project's ability to encourage public transportation and active modes of transportation."

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<sup>3</sup> Letter to John Signo, City of Gardena, signed by Miya Edmonson, IGR/CEQA Branch Chief of Caltrans, September 10, 2020.

In addition, the Los Angeles County Metropolitan Transportation Authority (Metro) also submitted a letter<sup>4</sup> to the City in response to the NOP. Within the letter, Metro states, “Metro encourages the incorporation of transit-oriented, pedestrian-oriented parking provision strategies such as the *reduction or removal of minimum parking requirements* [emphasis added] and the exploration of shared parking opportunities. These strategies could be pursued to reduce automobile-orientation in design and travel demand.”

In summary, the Draft EIR NOP letters submitted to the City by Caltrans and Metro support reduced parking for the Specific Plan based on the TOD characteristics of the Project.

### *TOD Research*

LLG conducted a review of studies related to parking demand and recommended parking ratios for residential TOD projects. Below is a summary of two recent studies relevant to the analysis of parking for the Project:

- City of Palo Alto Study. In 2018, the City of Palo Alto reviewed potential adjustments to its parking ratios for multi-family housing, including for market-rate residential projects. The City commissioned a parking study<sup>5</sup> which included parking utilization counts at existing market-rate residential sites. At the project located a half-mile from a Caltrain station, the peak parking demand rate was observed to be 0.79 spaces per unit. At an additional project located 1.2 miles from a Caltrain station, the peak parking demand rate was observed to be 1.0 spaces per unit. Accordingly, as the Project is located approximately two-thirds of a mile from a Green Line station, it is reasonable to foresee that the expected parking demand will likely fall between the 0.79 spaces and 1.0 spaces per unit observed in the Palo Alto study.
- BART TOD Guidelines. In May 2017, Bay Area Rapid Transit (BART) issued a study<sup>6</sup> providing suggested parking supply guidelines for residential projects constructed within a half-mile of its transit stations. The BART TOD guidelines recommend that agencies adopt no minimum parking requirements for residential projects located within a half-mile of transit stations, a maximum of one parking space per unit for residential projects that are a minimum of five stories in height, and 0.5 spaces per unit for projects that are a minimum of seven stories in height. The Project proposes to provide 5.5 levels of residential uses. Accordingly, the parking ratio recommendations in

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<sup>4</sup> Letter to John Signo, City of Gardena, signed by Shine Ling, Manager, Transit Oriented Communities, Metro, September 18, 2020

<sup>5</sup> *City of Palo Alto Multi-Family Parking Demand Rates*, Fehr & Peers, April 2018.

<sup>6</sup> *BART Transit-Oriented Development Guidelines*, May 2017.

the BART document for residential projects are consistent with those provided in the proposed Specific Plan.

*TOD Ordinances in Other Jurisdictions*

Parking requirements at specific TOD projects, as well as jurisdictional requirements, were reviewed as part of this parking study. Many jurisdictions have recognized that residential projects in areas with high levels of transit service experience less parking demand as compared to developments in areas where nearly all travel is done by private automobile.

**Table 1** provides a summary of residential parking requirements in TOD areas located in California. *Table 1* provides a breakdown of residential parking requirements for studio, 1-bedroom, and 2-bedroom units, as well as any residential guest parking rates, with a comparison to the Specific Plan residential parking rate.

**Table 1  
 Residential Parking Examples from Other Jurisdictions**

Project/Jurisdiction	Location	Minimum Parking Requirements			
		Studio	Bedroom	2-Bedroom	Guest Parking
<b>Proposed Project</b>					
Proposed Specific Plan	Gardena	1 sp/unit	1 sp/unit	1 sp/unit	0 sp/unit
<b>Other Jurisdictions</b>					
L.A. County Metro <sup>7</sup>	L.A County	0 sp/unit	0 sp/unit	0 sp/unit	0 sp/unit
Willowbrook TOD Plan	Los Angeles	.6 sp/unit	.9 sp/unit	1.2 sp/unit	.15 sp/unit
Vermont/Western TOD	Los Angeles	1 sp/unit	1 sp/unit	1 sp/unit	.25 sp/unit
San Diego TPA	San Diego	0 sp/unit	0 sp/unit	0 sp/unit	0 sp/unit
City of Oakland <sup>8</sup>	Oakland	1 sp/unit	1 sp/unit	1 sp/unit	0 sp/unit
City of Berkeley	Berkeley	1 sp/unit	1 sp/unit	1 sp/unit	0 sp/unit

<sup>7</sup> Per the Metro NOP letter, Metro suggests reduction or removal of minimum parking requirements for TOD projects.

<sup>8</sup> Parking rates apply Citywide except in Central Business District, Broadway Valdez District and Coliseum Area District which have reduced parking requirements for multi-family residential.

As shown in *Table 1*, the proposed Specific Plan provides a similar or greater parking rate for residential units as the other existing TOD plans/ordinances. The Willowbrook TOD Plan shown on *Table 1* was recently enacted by the County of Los Angeles. The plan area is located in the vicinity of the Willowbrook station along the Metro Green Line.

In summary, the residential parking rates proposed for the Project as part of the Specific Plan will result in a parking supply that will exceed the existing TOD plans and ordinances adopted by other agencies in California.

**Parking Dimensions**

The Specific Plan proposes parking space dimensions that vary from Section 18.40.050 of the Gardena Municipal Code. *Table 2* provides a comparison of the parking space dimensions required by the Gardena Municipal Code and the corresponding dimensions proposed in conjunction with the Specific Plan.

**Table 2  
 Comparison of Parking Stall Dimensions  
 Gardena Municipal Code vs. Proposed Specific Plan**

Issue Area <sup>9</sup>	Gardena Municipal Code (Section 18.40.050)	Proposed Specific Plan
Standard Parking Stall Dimensions <sup>10</sup>	9 x 18 feet	9 x 18 feet
Compact Parking Stall Dimensions	8 x 17 feet	9 x 16 feet
Drive Aisle Width	26 feet	24 feet
Proportion of Compact Spaces to Overall Number of Required Spaces	Up to 25% <sup>11</sup>	Up to 50%

<sup>9</sup> Based on 90-degree parking spaces

<sup>10</sup> Section 18.40.050 (B) of the Gardena Municipal Code stipulates that parking spaces adjacent to a wall or any obstruction shall have a minimum dimension of 10 feet by 20 feet. The Specific Plan proposes no additional adjustment to the standard and compact space dimensions.

<sup>11</sup> Section 18.40.050 (C) of the Gardena Municipal Code stipulates that compact parking spaces cannot be used to satisfy the required parking supply for residential uses. The Specific Plan proposes that compact spaces may be used to satisfy the required parking supply for residential uses.

The on-site parking garage proposed at the Project provides two “bays” of 90-degree parking spaces. That is, two two-way drive aisles with a row of 90-degree parking spaces located along each side of the both drive aisles. Each bay of parking is proposed to be 58 feet in width consisting of one row of compact spaces (16 feet in length) and one row of standard spaces (18 feet in length) separated by a two-way drive aisle (24 feet in width). In no circumstance will two rows of compact-sized parking spaces be provided within a single parking bay, except in the limited circumstances where a parking space in the row of standard-sized spaces is located adjacent to a wall or other obstruction (in which case it will be designated as a compact space).

Based on the Municipal Code parking dimension requirements (assuming standard size parking spaces), the overall width of the garage would need to be 124 feet: four rows of 90-degree parking spaces that are each 18 feet in length (72 feet overall) and two drive aisles that are 26 feet in width (52 feet overall). However, the existing width of the Project site parcel only permits construction of a parking garage that provides an overall width of 116 feet (i.e., eight feet less than the “standard” width of two bays of parking). Accordingly, the Specific Plan proposes adjustments to the Municipal Code parking dimensions as follows:

- Reduce the width of the drive aisle from 26 feet to 24 feet (resulting in a “savings” of four feet across the two bays of parking); and
- Provide two rows compact parking spaces (which are not permitted to satisfy required residential parking per the Municipal Code) and reduce the stall length from 18 feet to 16 feet (resulting in a “savings” of four feet).

Two additional adjustments to the Municipal Code parking dimensions are proposed based on the limited size of the Project site parcel:

- Allow up to 50% of the parking supply to be designated as compact spaces, instead of the maximum 25% of the supply of parking spaces that may be designated as compact spaces in the Municipal Code<sup>12</sup>; and
- Maintain the proposed parking stall length and width adjacent to walls and obstructions instead of adding additional length and width to the parking space dimensions per the Municipal Code.

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<sup>12</sup> As currently designed, approximately 41.2% of the parking supply (110 of the proposed supply of 267 spaces) are proposed to be compact spaces. The Specific Plan provision for designating up to 50% of the parking supply as compact spaces allows for changes to the final parking layout that may be needed at the time of preparation of construction documents.



Justifications for the parking dimensions proposed under the Specific Plan are as follows:

- The proposed parking stall width and length, as well as the drive aisle width are consistent with or exceed the requirements of other jurisdictions. As noted, the Project proposes standard parking stall and compact parking stall dimensions that are 9 x 18 feet and 9 x 16 feet, respectively. In addition, a drive aisle width of 24 feet is proposed.
  - City of Los Angeles.<sup>13</sup> The parking stall dimensions proposed at the Project meet or exceed the minimum standard parking stall (8'-8" x 18 feet) and compact parking stall (7 x 15 feet) dimensions for the City of Los Angeles. In addition, for drive aisles, the City of Los Angeles requires 25'-4" adjacent to standard size stalls<sup>14</sup> and 20 feet adjacent to compact size stalls. The drive aisles proposed within the Project (24 feet) will closely match the City of Los Angeles requirement adjacent to standard size stalls and will exceed the requirement adjacent to compact size stalls by four feet.
  - County of Los Angeles.<sup>15</sup> The parking stall dimensions proposed at the Project exceed the County of Los Angeles minimum standard (8.5 feet) and compact (eight feet) parking width requirement. In addition, for drive aisles, the County requires 26 feet adjacent to standard size stalls and 23 feet adjacent to compact size stalls. The drive aisles proposed within the Project (24 feet) will closely match the County of Los Angeles requirement adjacent to standard size stalls and will exceed the requirement adjacent to compact size stalls by one foot.
- The Project characteristics allow for a deviation of typical parking dimension standards. The Project is a residential development and its vehicle parking area will be used almost exclusively by residents of the Project. Unlike other parking facilities, the parking area will be used by persons who are highly familiar with the layout of the garage. Further, the trip generation characteristics of residential projects are typically highly directional: outbound trips during the weekday morning commuter peak period and inbound trips during the weekday afternoon commuter peak period. Further, there is very little turnover of parking spaces during the course of a typical day. Thus, motorists driving through the garage will have little, if any conflict with other vehicles, including oncoming traffic.

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<sup>13</sup> City of Los Angeles Ordinance No. 142306

<sup>14</sup> The City of Los Angeles requires a drive aisle width of 25'-4" adjacent to standard size parking spaces that are nine feet in width.

<sup>15</sup> County Code Section 22.112.080

- Vehicle characteristics support smaller parking spaces. The relatively higher proportion of parking spaces that are 16 feet in length can be provided without adverse impacts to vehicle circulation in the Project garage because vehicle dimensions are generally smaller as compared to prior years. Below is the vehicle length for the five highest selling vehicles in California in 2019<sup>16</sup>:
  - Honda Civic: 15'-3"
  - Tesla Model 3: 15'-5"
  - Honda Accord: 16'-0"
  - Toyota Camry: 16'-0"
  - Toyota RAV4: 15'-2"

All of the vehicles listed above can be accommodated within the compact parking spaces that are proposed at the Project. Further, the proposal to provide a nine-foot width for the compact spaces at the Project (instead of the minimum eight-foot width for compact spaces permitted by the Gardena Municipal Code) ensures that motorists will be able to readily maneuver to and from the parking spaces with minimal delay. Therefore, the proposal in the Specific Plan to allow up to approximately 50% of the parking stalls at the Project to be designated as compact spaces will not adversely affect the safe and efficient flow of vehicle traffic through the garage. Further, the proposal to designate up to 50% of the parking stalls as compact parking spaces is similar to other jurisdictions, such as the previously referenced City of Los Angeles parking design standards which permit up to 40% of required parking spaces to be designated as compact parking stalls.

- Additional width is not required for parking spaces adjacent to walls or obstructions. The Specific Plan does not propose any additional or length for parking stalls adjacent to walls or obstructions within the Project's parking garage. As previously noted, all parking spaces (standard and compact) will be nine feet in width. This exceeds the City's required width for a compact parking space. Further, as previously noted, the trend in California for smaller-size vehicles, which can readily be accommodated within a nine-foot wide stall, even when located adjacent to a wall or obstruction. Finally, the Project proposes that any parking space adjacent to a wall or obstruction be designated as a compact space. No additional width is required for parking spaces located adjacent to walls or obstructions within the Project's parking garage.

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<sup>16</sup> Source: <https://www.edmunds.com/most-popular-cars/>

## Conclusions

Based on the Project's close proximity to employment centers and transit stations, including the Metro Green Line's Crenshaw Station, as well as research of existing parking demand rates and requirements at TOD projects, the 267 parking spaces will adequately serve the Project. In addition, the parking space dimensions as proposed within the Specific Plan will provide for the safe and efficient flow of vehicular traffic within the Project's parking garage.

cc: File