

# Kunzman Associates, Inc.

**10234 4TH STREET PROJECT** 

**PARKING ANALYSIS** 

April 9, 2018



# **10234 4TH STREET PROJECT**

# **PARKING ANALYSIS**

April 9, 2018

# Prepared by:

Chris Pylant ■ Carl Ballard, LEED GA ■ William Kunzman, P.E.



April 9, 2018

Mr. Tal Shoshan, President T-ROSE INVESTMENTS 3880 East Ebony Street Ontario, CA 91761

Dear Mr. Shoshan:

#### INTRODUCTION

The firm of Kunzman Associates, Inc. is pleased to provide this parking study for the proposed 10234 4th Street project in the City of Rancho Cucamonga. Kunzman Associates, Inc. has been asked to conduct a parking study for the project site to determine if adequate parking spaces will be provided for the proposed project.

This report summarizes our methodology, analysis, and findings. We trust that the findings, which are summarized in the front of the report, will be of immediate as well as continuing value to you and the City of Rancho Cucamonga in evaluating the proposed development. Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided within Appendix A.

## **FINDINGS**

- 1. Five Star Foods currently operates out of two buildings totaling approximately 75,000 square feet located at 3880 Ebony Street in the City of Ontario and 9481 Hyssop Drive in the City of Rancho Cucamonga.
- 2. Five Star Foods plans to consolidate its operations into a new facility at 10234 4th Street in the City of Rancho Cucamonga. The 58,130 square foot building will consist of 7,250 square feet of office, 20,080 square feet of manufacturing, and 30,800 square feet of warehousing. The new facility is proposed to provide 74 parking spaces, 1 dedicated trailer parking space, and 4 truck loading docks/trailer parking spaces.
- 3. To quantify the existing parking demand for the existing building at 3880 Ebony Street, a parking survey was conducted on Thursday (March 29, 2018) from 7:00 AM to 6:00 PM. The maximum number of occupied parking spaces for the 3880 Ebony Street facility during the peak periods was 37 parked vehicles from 12:00 Noon to 1:00 PM.
- 4. Based on the projected maximum peak parking demand of 67 parking spaces, the 74 on-site parking spaces at 10234 4th Street are expected to provide adequate off-street parking for the proposed project.

Mr. Tal Shoshan, President T-ROSE INVESTMENTS April 9, 2018

5. In accordance with Section 17.64.090 of the Rancho Cucamonga Municipal Code, the project will effectively provide 1.5 trailer parking spaces for each loading dock position.

#### **EXISTING CONDITIONS**

Five Star Foods currently operates out of two buildings totaling approximately 75,000 square feet located at 3880 Ebony Street in the City of Ontario and 9481 Hyssop Drive in the City of Rancho Cucamonga.

#### **PROPOSED PROJECT**

Five Star Foods plans to consolidate its operations into a new facility at 10234 4th Street in the City of Rancho Cucamonga. The 58,130 square foot building will consist of 7,250 square feet of office, 20,080 square feet of manufacturing, and 30,800 square feet of warehousing. The new facility is proposed to provide 74 parking spaces, 1 dedicated trailer parking space, and 4 truck loading docks/trailer parking spaces. The project location map is shown on Figure 1 and the site plan is illustrated on Figure 2.

#### **PARKING CODE**

The City of Rancho Cucamonga Parking Code requirements are included within Appendix B. Based on review of the City of Rancho Cucamonga Parking Code requirements, 96 parking spaces are required for the proposed project (see Table 1). As demonstrated in the following sections, the actual number of offstreet parking spaces required for the project is expected to be lower than required per City Code based on a parking survey conducted at the existing packing facility.

#### **PARKING SURVEY**

To quantify the parking demand for the existing packing facility at 3880 Ebony Street, a parking survey was conducted on Thursday (March 29, 2018) from 7:00 AM to 6:00 PM. The existing parking demand was determined by surveying the existing facility at 1-hour intervals.

The existing facility at 3880 Ebony Street has a private parking lot with 11 parking spaces. In addition, employees utilize adjacent street parking on both sides of Ebony Street. Though this street parking is shared with other area businesses, all parked cars adjacent to 3880 Ebony Street were assumed to be associated with Five Star Foods.

The existing parking survey is shown in Table 2. As indicated in Table 2, the maximum number of occupied parking spaces for the 3880 Ebony Street facility during the peak periods was 37 parked vehicles from 12:00 Noon to 1:00 PM.

#### PROJECTED MAXIMUM PEAK PARKING DEMAND

Table 3 depicts the projected maximum peak parking demand for the facility proposed at 10234 4th Street. This demand was calculated by adding the existing measured peak parking demand for the facility at 3880 Ebony Street and the calculated parking requirement of the existing warehouse at 9481 Hyssop

Mr. Tal Shoshan, President T-ROSE INVESTMENTS April 9, 2018

Drive based on the City of Rancho Cucamonga Parking Code<sup>1</sup>. Finally, a ten (10) percent overage factor was included as a factor of safety. This is a recommended practice in the traffic engineering community.

The existing measured parking demand at 3880 Ebony Street, plus the calculated parking requirement for 9481 Hyssop Drive, plus a ten (10) percent overage factor equals a projected maximum peak parking space demand of 67 parking spaces  $((37 + 23.7) \times 1.1 = 66.8)$ .

#### OTHER PARKING CONSIDERATIONS

Section 17.64.090 of the Rancho Cucamonga Municipal Code requires that one trailer parking space be provided for each loading dock door. The project proposes to provide one dedicated trailer parking space and four loading dock doors.

The applicant has stated that their type of food manufacturing does not require long-term trailer parking. The applicant's current sanitation Standard Operating Procedures require each loading dock position to be sanitized on a regular basis. This means that while four loading dock positions will be provided, a maximum of two will be in use at any given time. The other two loading dock positions can be used for trailer parking. This effectively results in three provided trailer parking spaces for two loading dock positions.

### **CONCLUSIONS**

Based on the projected maximum peak parking demand of 67 parking spaces, the 74 on-site parking spaces at 10234 4th Street are expected to provide adequate off-street parking for the proposed project.

It has been a pleasure to service your needs on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 973-8383.

Sincerely,

KUNZMAN ASSOCIATES, INC.

Chris Pylant Associate

JN 7378

KUNZMAN ASSOCIATES, INC. William Kunzman

William Kunzman, P.E.

**Principal** 

<sup>&</sup>lt;sup>1</sup> Off-street parking requirement for the 27,948 square foot facility at 9481 Hyssop Drive was calculated using the City of Rancho Cucamonga parking requirements for warehousing.

Table 1

City of Rancho Cucamonga Parking Code Requirements<sup>1</sup>

				Parking
				Spaces
Land Use	Quantity	Units <sup>2</sup>	Parking Code Requirements	Required
Warehousing				
- First 20,000 Square Feet	20.000	TSF	1 parking space per 1,000 square feet	20.0
- Second 20,000 Square Feet	10.800	TSF	1 parking space per 2,000 square feet	5.4
Manufacturing	20.080	TSF	1 parking space per 500 square feet	40.2
Office	7.400	TSF	1 parking space per 250 square feet	29.6
Total				95.2
TOtal				(Say 96)

 $<sup>^{\,1}</sup>$  City of Rancho Cucamonga parking code requirements are included in Appendix B.

<sup>&</sup>lt;sup>2</sup> TSF = Thousand Square Feet

Table 2

3880 Ebony Street Parking Count<sup>1</sup>
Thursday (March 29, 2018)

	Number of Parked Vehicles and Percentage of Occupi					of Occupie	d Parking	Spaces
		Parking Zone						
Time Period	A (Park	ing Lot)	B (Street	Parking)	C (Street	Parking)	To	tal
Parking Spaces Provided	1	1	1	7 <sup>2</sup>	2	2 <sup>2</sup>	5	$0^2$
7:00 AM to 8:00 AM	2	18%	11	65%	15	68%	28	56%
8:00 AM to 9:00 AM	2	18%	15	88%	15	68%	32	64%
9:00 AM to 10:00 AM	3	27%	15	88%	15	68%	33	66%
10:00 AM to 11:00 AM	5	45%	16	94%	15	68%	36	72%
11:00 AM to 12:00 NOON	5	45%	15	88%	15	68%	35	70%
12:00 NOON to 1:00 PM	7	64%	15	88%	15	68%	37	74%
1:00 PM to 2:00 PM	5	45%	9	53%	6	27%	20	40%
2:00 PM to 3:00 PM	4	36%	9	53%	4	18%	17	34%
3:00 PM to 4:00 PM	4	36%	6	35%	2	9%	12	24%
4:00 PM to 5:00 PM	3	27%	6	35%	2	9%	11	22%
5:00 PM to 6:00 PM	2	18%	5	29%	2	9%	9	18%

<sup>&</sup>lt;sup>1</sup> The peak parking demand is 36 parked vehicles from 12:00 Noon to 1:00 PM.

Table 3
Projected Peak Parking Demand

Descriptor	Number of Parking Spaces
Maximum Parking Demand for Existing Facility at 3880 Ebony Street <sup>1</sup>	37.0
Number of Parking Spaces Required at 9481 Hyssop Drive <sup>2</sup>	23.7
Subtotal	60.7
10% Overage Factor	6.1
Maximum Peak Parking Demand	66.8 (Say 67)
Proposed Parking Spaces Provided	74

<sup>&</sup>lt;sup>1</sup> See Table 2.

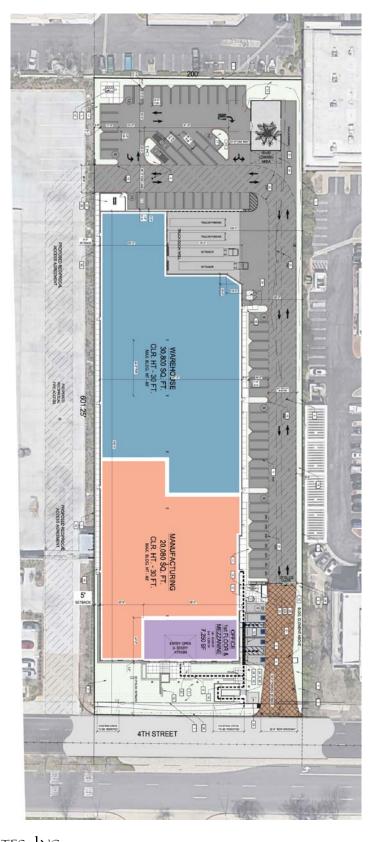
<sup>&</sup>lt;sup>2</sup> Off-street parking requirement for the 27, 948 square foot facility at 9481 Hyssop Drive was calculated using the City of Rancho Cucamonga parking requirements for warehousing.

# Figure 1 Project Location Map



Kunzman Associates, Inc.

Figure 2 Site Plan



**APPENDIX A** 

**Glossary of Transportation Terms** 

#### **GLOSSARY OF TRANSPORTATION TERMS**

### **COMMON ABBREVIATIONS**

AC: Acres

ADT: Average Daily Traffic

Caltrans: California Department of Transportation

DU: Dwelling Unit

ICU: Intersection Capacity Utilization

LOS: Level of Service

TSF: Thousand Square Feet V/C: Volume/Capacity VMT: Vehicle Miles Traveled

### **TERMS**

**AVERAGE DAILY TRAFFIC**: The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

**BANDWIDTH:** The number of seconds of green time available for through traffic in a signal progression.

**BOTTLENECK**: A constriction along a travelway that limits the amount of traffic that can proceed downstream from its location.

**CAPACITY**: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

**CHANNELIZATION:** The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

**CLEARANCE INTERVAL**: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

**CORDON**: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

**CYCLE LENGTH**: The time period in seconds required for one complete signal cycle.

**CUL-DE-SAC STREET**: A local street open at one end only, and with special provisions for turning around.

**DAILY CAPACITY**: The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

**DELAY:** The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

**DEMAND RESPONSIVE SIGNAL**: Same as traffic-actuated signal.

**DENSITY**: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

**DETECTOR:** A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

**DESIGN SPEED**: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

**DIRECTIONAL SPLIT**: The percent of traffic in the peak direction at any point in time.

**DIVERSION:** The rerouting of peak hour traffic to avoid congestion.

FORCED FLOW: Opposite of free flow.

**FREE FLOW**: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

**GAP:** Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

**HEADWAY:** Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

**INTERCONNECTED SIGNAL SYSTEM**: A number of intersections that are connected to achieve signal progression.

**LEVEL OF SERVICE**: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

**LOOP DETECTOR**: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

**MINIMUM ACCEPTABLE GAP**: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

**MULTI-MODAL**: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

**OFFSET**: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

**PLATOON:** A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

**ORIGIN-DESTINATION SURVEY**: A survey to determine the point of origin and the point of destination for a given vehicle trip.

**PASSENGER CAR EQUIVALENTS (PCE)**: One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

**PEAK HOUR**: The 60 consecutive minutes with the highest number of vehicles.

**PRETIMED SIGNAL**: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

**PROGRESSION**: A term used to describe the progressive movement of traffic through several signalized intersections.

**SCREEN-LINE**: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

**SIGNAL CYCLE**: The time period in seconds required for one complete sequence of signal indications.

**SIGNAL PHASE**: The part of the signal cycle allocated to one or more traffic movements.

**STARTING DELAY**: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

**TRAFFIC-ACTUATED SIGNAL**: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

**TRIP:** The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

**TRIP-END**: One end of a trip at either the origin or destination (i.e., each trip has two trip-ends). A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

**TRIP GENERATION RATE:** The quantity of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

**TRUCK:** A vehicle having dual tires on one or more axles, or having more than two axles.

**UNBALANCED FLOW:** Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

**VEHICLE MILES OF TRAVEL**: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

# **APPENDIX B**

City of Rancho Cucamonga Parking Code

<u>Title 17 DEVELOPMENT CODE</u>

ARTICLE IV. SITE DEVELOPMENT PROVISIONS

# **Chapter 17.64 PARKING AND LOADING STANDARDS**

## 17.64.010 Purpose.

This chapter establishes parking, loading, and bicycle parking regulations in order to provide for safe, attractive, and convenient parking and to ensure that parking areas are compatible with surrounding land uses. (Code 1980, § 17.64.010; Ord. No. 855 § 4, 2012)

# 17.64.020 Applicability.

The regulations contained in this chapter shall apply to the construction, change, or expansion of a use or structure and shall require that adequate parking spaces, loading areas, and bicycle parking areas are permanently provided and maintained for the benefit of residents, employees, customers, and visitors, within or outside of buildings or in a combination of both, in accordance with the requirements listed in this chapter. These requirements shall be in addition to any other development requirements contained elsewhere within the zoning code (e.g., landscaping).

Off-street parking and loading requirements of this chapter shall be recalculated as listed below.

- A. New uses and structures. For all buildings or structures erected and all uses of land established after the effective date of this title, parking for vehicles and bicycles, and loading facilities shall be provided as required by this chapter.
- B. *Modification to existing structures*. Whenever an existing building or structure is modified such that it creates an increase of more than ten percent in the number of parking spaces required, additional parking spaces shall be provided in accordance with the requirements of this chapter. (Code 1980, § 17.64.020; Ord. No. 855 § 4, 2012)

## 17.64.030 Permit and plan check requirements.

New parking lots and modifications or expansions to existing parking lots require the following entitlements:

- A. *Building permit*. New parking lot design and modifications to existing parking lots in conjunction with a substantial change in use to an existing structure shall be reviewed in conjunction with the building permit and any other land use or development permit.
- B. Site development review. Modification or improvements to an existing parking lot that impact the parking space layout, configuration, vehicular or pedestrian circulation, emergency vehicle/fire access lanes, number of stalls, or landscape planters shall require a site development review. Plans shall include any proposed traffic calming devices or measures such as speed bumps that will be placed in emergency vehicle/fire access lanes.
- C. *Exempt activities*. Parking lot improvements listed below shall be considered minor in nature if they do not alter the number or configuration of parking stalls and therefore exempt from plan check requirements located in section 17.16.030 (Plan Check/Zoning Clearance). However, exempt activities listed herein may require other ministerial permits (e.g., building permit, grading permit).
  - 1. Repair of any defects in the surface of the parking area, including repairs of holes and cracks.
  - 2. Repair or replacement in the same location of damaged planters and curbs.
  - 3. Work in landscape areas, including sprinkler line repair or replacement of landscape materials, except removal of trees. (Code 1980, § 17.64.030; Ord. No. 855 § 4, 2012; Ord. No. 863 § 4, 2013)

# 17.64.040 General parking and loading requirements.

The layout of parking spaces, loading berths, and parking aisles shall comply with all the requirements listed below. These parking requirements apply to both on- and off-street parking spaces, unless specifically stated otherwise.

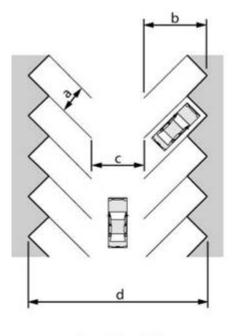
- A. The required parking spaces, loading berths, and parking aisles may not be located on any street right-of-way.
- B. Parking space and drive aisle dimensions.
  - 1. When outdoors (e.g., parking lot), each parking space shall have a minimum size of nine feet by 17 feet with a required one-foot overhang (e.g., over a curb stop) and shall be free of obstructions such as columns or walls.
  - 2. When indoors or under a shelter (e.g., parking structure or carport/shade structure), each parking space shall be ten feet by 20 feet where columns or walls are located within the parking area.
  - 3. Each loading berth shall be a minimum size of 12 feet by 30 feet whether indoors or outdoors.
  - 4. When garage parking is required, parking spaces shall be designed in a side by side configuration with a minimum of ten feet wide by 20 feet deep for each required parking space free and clear of obstructions. If tandem parking is provided, only one space will count toward the minimum parking requirements.
  - 5. Parking aisles and spaces shall meet the dimensional requirement of Table 17.64.040-1 (Angled Parking Space and Drive Aisle Dimensions) and Table 17.64.040-2 (Parallel Parking Space and Drive Aisle Dimensions) and the related Figures 17.64.040-1 and 17.64.040-2.
- C. Parking space and drive aisle dimensions.
  - 1. When outdoors (e.g., parking lot), each parking space shall have a minimum size of nine feet by 17 feet with a required one-foot overhang (e.g., over a curb stop) and shall be free of obstructions such as columns or walls.
  - 2. All parking stalls shall be permanently maintained with double lines, with two lines located an equal of nine inches on either side of the stall sidelines.

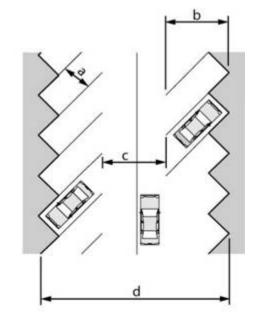
TABLE 17.64.040-1 ANGLED PARKING SPACE AND DRIVE AISLE DIMENSIONS

Angle	Stall Width a	Stall to Curb b	Aisle c	Two Rows + Aisle d
90°	9'-0"	19'-0"	25′-0″ <sup>(1)</sup>	63'-0"
	9'-6"	19'-0"	24′-8″ <sup>(1)</sup>	62'-6"
	10'-0"	19'-0"	24′-0″ (1)	62'-0"
60°	9'-0"	21′0″	20′-0″ (1)	62"-0"
	9'-0"	21'-0"	19'-0" (2)	61'-0"
	9'-6"	21′-3″	18'-6" (2)	61'-0"
	10'-0"	21'-6"	18'-0" (2)	61'-0"
45°	9'-0"	19'-10"	20′-0″ (1)	59'-8"
	9'-0"	19'-10"	16'-4" <sup>(2)</sup>	56'-0"
	9'-6"	20'-2"	15'-2" (2)	55'-6"
	10'-0"	20′-6″	14'-0" <sup>(2)</sup>	55'-0"

Table notes:

- (1) Two-way aisle.
- (2) One-way aisle.





One-Way Aisle

Two-Way Aisle

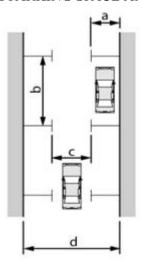
TABLE 17.64.040-2 PARALLEL PARKING SPACE AND DRIVE AISLE DIMENSIONS

Stall Width a	Stall Length b	Aisle c	Two Rows + Aisle d
9"-6'	24"-0'	12"-0'1	31'

Table notes:

(1) One-way aisle.

FIGURE 17.64.040-2 PARALLEL PARKING SPACE AND DRIVE AISLE DIMENSIONS



- D. Parking spaces and aisles shall have a maximum grade of seven percent.
- E. Each parking space and aisle shall have a minimum eight-foot vertical clearance.
- F. Each loading berth and access thereto shall have a minimum 15-foot vertical clearance.
- G. Each parking space and loading berth shall have vehicular access to the street, without passing over other parking spaces, unless as specifically allowed as tandem parking spaces.
- H. Neither a required side yard abutting a street nor a front yard shall be used for off-street parking. (Code 1980, § 17.64.040; Ord. No. 855 § 4, 2012; Ord. No. 860 § 4, 2013; Ord. No. 863 § 4, 2013)

- A. The following number of parking spaces shall be required to serve the uses or buildings listed, as established in Table 17.64.050-1 (Parking Requirements by Land Use). Multiple property owners may apply for a use permit for shared parking pursuant to section 17.64.060 (Reductions in Parking Requirements). Otherwise, all uses must provide the sum of the requirements for each individual use. Where the requirements result in a fractional space, the next larger whole number shall be the number of spaces required. In addition, the requirements listed below shall apply.
  - 1. "Square feet" means "gross square feet" and refers to the sum gross square feet of the floor area of a building and its accessory buildings unless otherwise specified.
  - 2. For the purpose of calculating residential parking requirements, dens, studies, or other similar rooms that may be used as bedrooms shall be considered bedrooms.
  - 3. Where the number of seats is listed to determine required parking, seats shall be construed to be fixed seats. Where fixed seats provided are either benches or bleachers, one seat shall be construed to equal 18 linear inches for pews and 24 inches for dining, but in no case shall seating be less than determined as required by the building code.
  - 4. When the calculation of the required number of off-street parking spaces results in a fraction of a space, the total number of spaces shall be rounded up to the nearest whole number.
  - 5. Where private streets are proposed for residential development, resident and guest parking shall be provided as determined by the approving authority in conjunction with the required planning entitlement(s).
  - 6. For projects on commercial, office and industrial zoned properties, square footage dedicated to office hallways 44 inches or less, electrical and mechanical rooms, elevator shafts, stairwells, bathrooms and storage closets may be deducted from the gross square footage for parking stall calculation purposes.

TABLE 17.64.050-1 PARKING REQUIREMENTS BY LAND USE

Use	Spaces	Notes
Residential		
Single-family detached dwellings	2 per unit	2 in garage
Multi-family development (condominium, townhome, etc.), semi-		
detached single-family (zero lot line, patio homes, duplexes, etc.), and		
mobilehome parks (1)		
- Studio	1.3 per unit	1 in garage or carport
- One bedroom	1.5 per unit	1 in garage or carport
- Two bedrooms	2 per unit	1 in garage or carport
- Three bedrooms	2 per unit	2 in garage or carport
- Four or more bedrooms	2.5 per unit	2 in garage or carport
- Visitor (additional required)	1 per 3 units	
Commercial, Service, and Office Uses		
Shopping centers		
- Less than 25,000 square feet	Varies	See individual uses
- 25,000 to 599,000 square feet	5 per 1,000 sf	Centers built prior to 1988 4.5/1,000
- 599,000 to 1,000,000 square feet	5.5 per 1,000 sf or a parking study may be provided	Centers built prior to 1988 require 4.5/1,000
- Food service (if over 15% of GLA) <sup>(2)</sup>	+1 per 100 sf	Additional applied to floor area of food service use
- Cinemas in centers less than 100,000 square feet (occupying less than 10% of GLA) $^{(2)}$	+3 per 100 seats	
- Cinemas in centers of 100,000 to 200,000 square feet, additional parking only required after the first 750 seats	+3 per 100	
- Offices (if over 10% of GLA) <sup>(2)</sup>	-	Parking study required
- Shopping center over 1,000,000 square feet	-	Parking study required
Carwash and detail (full-service)	16 stalls	

Use	Spaces	Notes
Carwash (self-service and drive-thru)	2.5 per wash bay	
Service/gas station	3.0  per  1,000  sf + 2  per service bay	
Barber shops/beauty parlors	Park at retail	
Laundromats and/or dry cleaners	Park at retail	
Offices, financial institutions, retail stores	4 per 1,000 sf	
Commercial storage yards (e.g., contractors, salvage)	6 spaces	Separated from enclosed storage area
Lumber yard	4 per 1,000 sf	Includes area of open area devoted to display of lumber and other products
Mortuaries and funeral homes	1 per 35 sf	Applies only to the assembly room floor area
Motels and hotels	1 per unit + 2	2 additional spaces for manager
Vehicle sales, repair, service	2.5 per 1,000 sf	Customer parking (additional spaces needed for vehicle storage related to business operations)
Furniture and appliance stores	2 per 1,000 sf	
Day cares/preschools	1 per employee + 1 per 5 children	
Public utilities uses	1 per 2 employees (2 minimum)	Storage for utility-owned vehicles must also be provided for Commercial Recreation Uses
Bowling alleys and/or billiard halls	5 per alley and/or 2 per table	
Stables	1 per 5 horses	
Driving ranges	1 per tee	Additional parking required for related uses on site
Golf courses	6 per hole	Additional parking required for related uses on site
Miniature golf course	3 per hole	Additional parking required for related uses on site
Skating rinks	5 per 1,000 sf	Includes related uses and all indoor and outdoor "active" areas
Swimming pool (commercial)	5 per 1,000 sf	Included related uses and all indoor and outdoor "active" areas
Tennis, handball, and racquetball facilities	3 per court	Additional parking required for related uses on site
Health clubs and other fitness related facilities	5 per 1,000 sf	
Educational Uses		
Elementary and junior high schools	2 per classroom	
Senior high school	1 per employee + 1 per 6 students	
Colleges, universities	1 per 2 employees + 1 per 3 students	
Commercial schools (trade, business colleges, etc.)	1 per student + 1 per faculty	
Medical/Health Uses		
Dentist, medical, veterinary offices/clinics	5 per 1,000 sf	
Congregate care facilities (e.g., nursing, children's, sanitariums)	1 per 4 beds	Based on resident capacity
Hospitals	1.75 per bed	
Places of Assembly		
Restaurants and lounges	10 per 1,000 sf	
Fast-food restaurant	10 per 1,000 sf	
Auditoriums, sports arenas, stadiums	1 per 3 seats or 1 per 35 sf of seating area	Movie theaters

Use	Spaces	Notes
- Single screen	1 per 3 seats	
- Multi-screen	1 per 4 seats	
		1.5 linear feet on a bench is
Other places of essembly (e.g. aburahas)	1 per 3 seats or 1 per 35 sf of main	equivalent to 1 seat; schedule of
Other places of assembly (e.g., churches)	auditorium	activities and/or parking study may
		be required
Industrial, Warehousing, and Manufacturing		
	1 per 1,000 sf for first 20,000 sf; 1	
Warehouse/storage	per 2,000 sf for the next 20,000 sf;	
wateriouse/storage	and 1 per 4,000 sf for the remaining	
	sf	
Industrial/manufacturing	2 per 1,000 sf	
Research and development	3 per 1,000 sf	
Office and administration	4 per 1,000 sf	
Multi-tenant buildings (office less than 35 percent GLA) (2)	2.5 per 1,000 sf	
Indoor wholesale/retail commercial	4 per 1,000 sf	

### Table notes:

- (1) Fifty percent of the total required covered spaces shall be within enclosed garage structures. The use of carports requires approval from the design review committee.
- (2) GLA is gross leasable area.
  - B. *Uses not listed*. Other uses not specifically listed in this section shall furnish parking as required by the designated approving authority in determining the off-street parking requirements. The approving authority shall be guided by the requirements in this section generally and shall determine the minimum number of spaces required to avoid interference with public use of streets and alleys. (Code 1980, § <u>17.64.050</u>; Ord. No. 855 § 4, 2012; Ord. No. 863 § 4, 2013)

# 17.64.060 Reductions in parking requirements.

- A. The required number of parking spaces may be reduced in accordance with the following requirements.
- B. Shared parking. In order to encourage efficient use of parking spaces and good design practices, the total parking requirements for conjunctive uses shall be based on the number of spaces adequate to meet various needs of the individual uses operating during the peak parking period.
  - 1. *Use permit for shared parking*. A conditional use permit may be approved for shared parking facilities serving more than one use on a site or serving more than one property. The use permit may allow for a reduction of the total number of spaces required by this chapter if the following findings are made:
    - a. The peak hours of parking demand from all uses do not coincide so that peak demand will not be greater than the parking provided.
      - i. The efficiency of parking provided will equal or exceed the level that can be expected if parking for each use were provided separately.
  - 2. *Shared parking agreement.* A written agreement between the landowners and in some cases the city that runs with the land shall be filed, in a form satisfactory to the city attorney, and include:
    - a. A guarantee that there will be no substantial alteration in the uses that will create a greater demand for parking without application for approval of an amended conditional use permit.
    - b. A reciprocal grant of nonexclusive license among the business operator(s) and the landowner(s) for access to and use of the shared parking facilities.
    - c. Evidence that the agreement has been recorded in the county recorder's office.
- C. Other parking reductions. Required parking for any use except a single-family dwelling, second dwelling unit, or two-family dwelling may be reduced through approval of a minor exception or a conditional use permit by the planning director.

- 1. *Criteria for approval*. The planning director will only grant a conditional use permit for reduced parking if it finds that the project meets all of the conditional use permit criteria in section 17.16.120 (Conditional Use Permits) and that three or more of the circumstances listed below are true.
  - a. The use will be adequately served by the proposed parking due to the nature of the proposed operation; proximity to frequent transit service; transportation characteristics of persons residing, working, or visiting the site; or because the applicant has undertaken a travel demand management program that will reduce parking demand at the site.
  - b. Parking demand generated by the project will not exceed the capacity of or have a detrimental impact on the supply of on-street parking in the surrounding area.
  - c. The site plan is consistent with the objectives of the zoning district and incorporates features such as unobtrusive off-street parking placed below the ground level of the project with commercial uses above or enclosed parking on the ground floor.
  - d. The applicant has provided on-site parking for car-share vehicles via a recorded written agreement between the landowner and the city that runs with the land. Agreement shall provide for proof of a perpetual agreement with a car-share agency to provide at least one car share vehicle on-site.
- 2. Application submittal requirements. In order to evaluate a proposed project's compliance with the above criteria, the planning director may require submittal of a parking demand study that substantiates the basis for granting a reduced number of spaces.
- D. *Mixed use parking*. All mixed use projects shall include a parking study prepared by a qualified traffic/parking consultant that demonstrates how proposed land uses utilize the parking spaces that are required per section 17.64.050-1. Parking studies are subject to review and acceptance by the director of engineering services/city engineer and planning director, and an independent peer review consultant. The parking study may also include a discussion of the following options for a reduction of required parking, including, but not limited to:
  - 1. Shared parking may be provided per section 17.64.060 B.
  - 2. State density bonus may be provided per chapter 17.46.
  - 3. Tandem parking may be counted towards the required parking calculation.
  - 4. Implement a parking management strategy that may contain the following provisions, but are not limited to:
    - a. Monitored with periodic inspections;
    - b. Storage within the unit, and not within garage (view windows on garages);
    - c. HOA to enforce limitation of number of vehicles per unit;
    - d. Time restriction on guest parking; and
    - e. Shuttles that cater to users within the development.
  - 5. Implement a car/bicycle share program in which vehicles/bicycles are made available for shared use to individuals on a short term basis. (Code 1980, § 17.64.060; Ord. No. 855 § 4, 2012; Ord. No. 881 § 4, 2015)

# 17.64.070 Parking requirements for the disabled.

- A. *Number of spaces, design standards*. Parking spaces for the disabled shall be provided in compliance with the building code and state and federal law.
- B. *Reservation of spaces required*. The number of disabled accessible parking spaces required by this chapter shall be reserved by the property owner/tenant for use by the disabled throughout the life of the approved land use.
- C. Upgrading of markings required. If amendments to state or federal law change standards for the marking, striping, and signing of disabled access parking spaces, disabled accessible spaces shall be upgraded in the time and manner required by law. (Code 1980, § 17.64.070; Ord. No. 855 § 4, 2012)

- A. Surface parking area. All surface parking areas shall have the following improvements:
  - 1. Each required parking space and aisle shall be graded, drained, and surfaced so as to prevent dust, mud, or standing water and shall be identified by pavement markings, wheel stops, entrance and exit signing, and directional signs, to the satisfaction of the city engineer. All new parking spaces shall be painted with double stripe pavement markings.
  - 2. Lighting, giving a ground-level illumination of one to five footcandles, shall be provided in the parking area during the time it is accessible to the public after daylight. Lighting shall be shielded to prevent glare on contiguous residential properties.
  - 3. Where such parking area abuts a street, it shall be separated by an ornamental fence, wall, or compact evergreen hedge having a height of not less than two feet and maintained at a height of not more than four feet. Such fence, wall, or hedge shall be maintained in good condition.
  - 4. Parking spaces shall be marked and access lanes clearly defined. Bumpers and wheel stops shall be installed as necessary.
  - 5. Landscape materials are permitted to overhang the curb/wheel stop creating a reduction in impervious surface material.
- B. Driveway location standards. Development projects located at intersections shall be accessed as follows:
  - 1. Driveways to access parcels located at the intersection of two streets shall, where feasible, be gained through driveways from the lesser street. Determination of which street is lesser shall be made based on total paving width, amount of traffic, adjacent traffic controls, and likely destinations along each street in question.
  - 2. Driveways serving parcels located at the intersection of two streets shall be situated at the maximum practical distance from the intersection.
  - 3. Where a proposed driveway is located at least 75 feet from the nearest cross street, the requirements of section 17.64.90.C.1 and 2 may be waived.
- C. *Driveway size and composition*. All residential driveways shall be a minimum of 19 feet in length and shall be constructed with a lasting, durable surface (e.g., concrete, asphalt, grasscrete, or similar material) and shall be constructed to appropriate requirements as determined by the city. (Code 1980, § <u>17.64.080</u>; Ord. No. 855 § 4, 2012; Ord. No. 860 § 4, 2013)

# 17.64.090 Loading area requirements.

- A. Required loading spaces for delivery and distribution. A building, or part thereof, having a floor area of 10,000 square feet or more that is to be occupied by any use requiring the receipt or distribution by vehicles or trucks of material or merchandise must provide at least one off-street loading space, plus one additional such loading space for each additional 40,000 square feet of floor area. The off-street loading space(s) must be maintained during the existence of the building or use it is required to serve. Truck-maneuvering areas must not encroach into required parking areas, travelways, or street rights-of-way (see Figure 17.64.090-2 (Loading Areas for Delivery)).
- B. Required loading spaces for customers. Customer loading spaces allow bulky merchandise to be loaded into customers' vehicles. For uses that sell bulky items (furniture, appliances, home improvement sales, etc.), at least two customer loading spaces per business establishment or one customer loading space per 40,000 square feet of floor area, whichever is greater shall be provided. Customer loading spaces shall be located adjacent to the building or to an outdoor sales area where bulky merchandise is stored and shall be clearly visible from the main building entry or through directional signage visible from the main entry. Customer loading spaces shall not be located in such a way that they impede on-site traffic circulation, as determined by the director of engineering services/city engineer or encroach into designated emergency vehicle/fire access lanes as determined by the fire chief (see Figure 17.64.090-1 (Customer Loading Areas).
- C. Requirements for off-street loading spaces.
  - 1. *Minimum size*. Each off-street loading space required by this section must be not less than 12 feet wide, 30 feet long, and 15 feet high, exclusive of driveways for ingress and egress and maneuvering areas. Loading spaces for customers may be 12 feet wide, 26 feet long, and 12 feet high.

- 2. Driveways for ingress and egress and maneuvering areas. Each off-street loading space required by this section must be provided with driveways for ingress and egress and maneuvering space adequate for trucks, per city standards.
- 3. Location of loading areas. An off-street loading space (excluding loading spaces for customers) required by this section must not be located closer than 30 feet to any lot or parcel of land in a residential district, unless such off-street loading space is wholly enclosed within a building or on all sides by a wall not less than eight feet in height. Except in industrial zoning districts, a loading door or loading dock that is visible from a public street must be screened with an eight-foot high, solid masonry or other sound-absorbing wall, with landscaping planted between the wall and the right-of-way.
- 4. *Trailer parking required*. One space of parking for a trailer is required for each loading dock door. The minimum dimensions of a single trailer parking space is 50 feet in length, 14 feet in width, and 14 feet in vertical clearance.

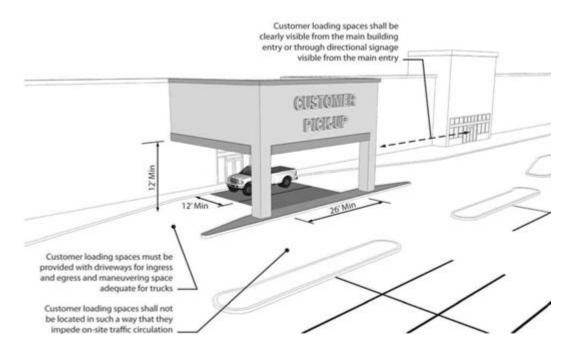
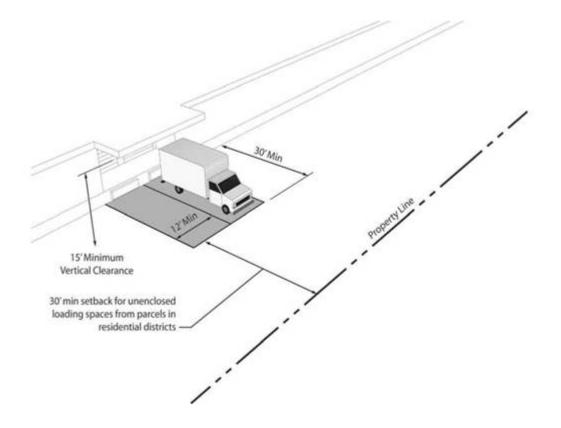


FIGURE 17.64.090-1 CUSTOMER LOADING AREAS

FIGURE 17.64.090-2 LOADING AREAS FOR DELIVERY

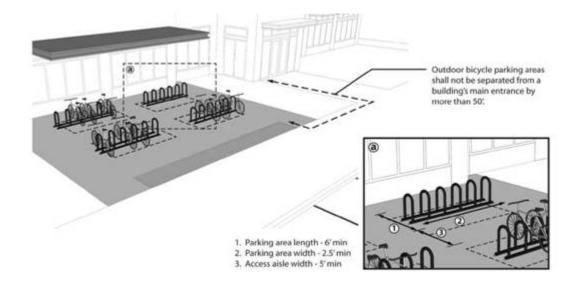


(Code 1980, § 17.64.090; Ord. No. 855 § 4, 2012; Ord. No. 858 § 4, 2013)

# 17.64.100 Bicycle parking requirements.

- A. *Applicability*. Bicycle parking shall be provided for all new construction, additions of ten percent or more floor area to existing buildings, and changes in land use classification. Single-family homes, duplexes, and multi-family dwellings of less than four units are exempt.
- B. Number of required bicycle parking spaces.
  - 1. Short-term bicycle parking. If a land use or project is anticipated to generate visitor traffic, the project must provide permanently anchored bicycle racks within 50 feet of the visitor's entrance. To enhance security and visibility the bicycle racks shall be readily visible to passers-by. The bicycle capacity of the racks must equal an amount equivalent to five percent of all required motorized vehicle parking. There shall be a minimum of one rack with capacity for two bicycles.
  - 2. Long-term bicycle parking. Buildings with over ten tenant-occupants (e.g., multi-family tenants, owners, employees) shall provide secure bicycle parking for five percent of required motorized vehicle spaces, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and include one or a combination of the following:
    - a. Covered, lockable enclosures with permanently anchored racks for bicycles,
    - b. Lockable bicycle rooms with permanently anchored racks,
    - c. Lockable, permanently anchored bicycle lockers.
  - 3. In the case of residential development, a standard garage is sufficient, if available.

FIGURE 17.64.100-1 REQUIRED BICYCLE PARKING



- C. Bicycle lockers. Where required bicycle parking is provided in lockers, the lockers must be securely anchored.
- D. *Bicycle racks*. Required bicycle parking may be provided in floor, wall, or ceiling racks. Where required bicycle parking is provided with racks, the racks must meet the following requirements:
  - 1. The bicycle frame and one wheel can be locked to the rack with a high-security U-shaped shackle lock if both wheels are left on the bicycle.
  - 2. A bicycle six feet long can be securely held with its frame supported so that the bicycle cannot be pushed or fall in a manner that will damage the wheels or components.
  - 3. The rack must be securely anchored.
- E. Special requirements for long-term bicycle parking. Mixed-use and high-density residential development have special long-term bicycle parking needs. As such, required spaces for such uses shall be designed and located to maximize security in one or more of the following locations/ways:
  - 1. In a locked room.
  - 2. In an area that is enclosed by a fence with a locked gate. The fence must be either eight feet high or be floor to ceiling.
  - 3. Within view of an attendant, security guard, or employee work area.
  - 4. In an area that is monitored by a security camera.
  - 5. Within a dwelling unit, dormitory, or other group housing unit, live/work unit, or artist's studio. If provided within a unit, racks or lockers are not required.
- F. Parking and maneuvering areas. Each required bicycle parking space must be accessible without moving another bicycle. There must be an aisle at least five feet wide adjacent to all required bicycle parking to allow room for bicycle maneuvering. Where the bicycle parking is adjacent to a sidewalk, the maneuvering area may extend into the right-of-way. The area devoted to bicycle parking must be hard surfaced.
- G. *Visibility*. If required bicycle parking is not visible from the street or main building entrance, a sign must be posted at the main building entrance indicating the location of the bicycle parking. (Code 1980, § 17.64.100; Ord. No. 855 § 4, 2012)

# 17.64.110 Electric vehicle parking requirements.

The following requirements apply to electric vehicle parking facilities. All charging facilities shall be approved through the plan check/zoning clearance process:

- A. *Electric vehicle charging*. When provided, electric vehicle charging stations shall meet the requirements of the California Electrical Code.
- B. *Designated spaces*. Outdoor charging of electric vehicle shall only occur in designated electric vehicle spaces, according to the following:

- 1. Electricity shall only be provided from outdoor electrical outlets installed according to the <u>California</u> Electrical Code.
- 2. Electric cords shall not cross vehicular or pedestrian pathways.
- 3. When installed in common parking areas (e.g., surface parking lots, garages, etc.), the spaces shall be restricted to electric vehicles charging only and identified with signage and pavement markings.
- C. *Electric vehicles in single-family residential*. When installed, electric vehicle charging in single-family residential areas shall be located as follows:
  - 1. Within a garage or carport;
  - 2. Outside of setback area; or
  - 3. If within a setback area, screened from view of the public right-of-way with landscaping or fencing. (Code 1980, § 17.64.110; Ord. No. 855 § 4, 2012)

# 17.64.120 Maintenance.

The minimum number of parking spaces required in this chapter shall be provided and continuously maintained. A parking, loading, or bicycle parking area provided for the purpose of complying with the requirements of this chapter shall not be eliminated, reduced, or converted unless equivalent facilities approved by the approving authority are provided elsewhere in compliance with this chapter. (Code 1980, § 17.64.120; Ord. No. 855 § 4, 2012)

View the mobile version.



# KUNZMAN ASSOCIATES, INC.

OVER 40 YEARS OF EXCELLENT SERVICE

1111 Town & Country Road, Suite 34 Orange, California 92868 (714) 973-8383

www.kainc.us