

Appendix S

Shared Parking Analysis



PARKING DEMAND ANALYSIS
2ND + PCH PROJECT
Long Beach, California
April 10, 2017

April 10, 2017

Mr. Stephanie Eyestone-Jones
Eyestone Environmental
6701 Center Drive West, Suite 900
Los Angeles, CA 90045

LLG Reference: 2.16.3779.1

**Subject: Parking Demand Analysis for
2nd + PCH Project
Long Beach, California**

Engineers & Planners
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Dear Mr. Eyestone-Jones:

As requested, Linscott, Law, & Greenspan, Engineers (LLG) is pleased to submit this Parking Demand Analysis for the 2nd + PCH Project (hereinafter referred to as Project), a proposed mixed-use shopping center that will be located at the southwest corner of 2nd Street and Pacific Coast Highway in the City of Long Beach.

The proposed Project is expected to redevelop 10.77-acres with a 245,000 SF mixed use center, consisting of 95,000 SF of retail uses, a 55,000 SF grocery store, a 25,000 SF fitness/health club, and 70,000 SF of restaurant uses consisting of 40,000 SF of full service dining, 25,000 SF of high-turnover restaurant/fast-food uses and 5,000 SF of ready to eat/take-out food. The Project would provide a total of 1,150 parking spaces within two main parking structures, including a second-level parking deck above some of the single-story uses.

A parking study has been required by the City of Long Beach to evaluate the parking requirements and operational needs of the center at future full occupancy. This report evaluates those needs based on application of City code, and further application of the Urban Land Institute's (ULI) *Shared Parking* methodology.

Our method of analysis, findings, and recommendations are detailed in the following sections of this report. Briefly, we find the following:

- The proposed parking supply on the site totals 1,150 spaces.
- A "code" calculation for full occupancy levels of individual uses upon completion of the Project requires 1,225 spaces, resulting in a theoretical deficiency of 75 spaces.
- Also assuming full future occupancy upon completion of the Project a shared parking analysis using City code ratios along with ULI parking profiles yields

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a peak weekday parking demand of 1,131 spaces that when compared to the 1,150 provided spaces results in a surplus of 19 spaces; the weekend peak parking demand totals 1,134 spaces, which results in a surplus of 16 spaces.

- The proposed mix of site uses clearly support the basis for application of the shared parking methodology.
- Consequently, it is concluded that there is adequate parking on site to accommodate the proposed tenant mix of the Project.

PROJECT LOCATION AND DESCRIPTION

The proposed Project site is a 10.77-acre parcel of land located at 6400 East Pacific Coast Highway in the City of Long Beach, California. The project site is currently occupied primarily by the 248-room Seaport Marina Hotel. Based on information provided by the hotel operator, the existing Seaport Marina Hotel currently has 170 rooms in operation out of a possible 248 rooms. Access to the subject property is now provided by a right-turn only driveway and a full access driveway on Pacific Coast Highway, a right-turn only driveway on 2nd Street, and three driveways on Marina Drive that are limited to right-turn only movements.

The proposed Project is expected to redevelop the 10.77-acre site at 6400 East Pacific Coast Highway. According to information provided by Eyestone Environmental and the City of Long Beach, the project site is designated as Land Use District (LUD) No. 7, Mixed Use District, by the City's General Plan and is zoned as Subarea 17 within Planned Development District 1 (PD-1), Southeast Area Development and Improvement Plan (SEADIP). Per the City's General Plan, LUD No.7 uses included development of employment centers, inclusive of retail/commercial uses like that of the proposed Project and hence is consistent with the General Plan land use designation for the subject property. The SEADIP identifies commercial uses within Subarea 17, and with the exception of the general developments provisions applicable to the entire development area, does not include specific development and use standards for Subarea 17¹.

Figure 1, located at the rear of this letter report, presents a Vicinity Map, which illustrates the general location of the Project site in the context of the surrounding

¹ The SEADIP states that Subarea 17 is fully developed in accordance with the Retail Center (CR) zone. Based on modifications for the City's Zoning Regulations, the CR zone now corresponds to the City's Community Commercial Automobile-Oriented (CCA) District. In accordance with the Long Beach Municipal Code, uses allowed in the CCA District include retail and service uses for an entire community, such as convenience and comparison shopping goods and associated services.

street system. **Figures 2A** and **2B** present level one and level two of the proposed Project, respectively.

Table 1, located at the end of this letter report, following the figures, summarizes the proposed development totals. A review of **Table 1** indicates that the proposed Project include the construction of up to 245,000 square feet (SF) of retail/commercial floor area, including 95,000 SF of retail uses, a 55,000 SF grocery store, a 25,000 SF fitness/health club, and 70,000 SF of restaurant/food uses consisting of 40,000 SF of full service dining, 25,000 SF of high-turnover restaurant/fast-food uses and 5,000 SF of ready to eat/take-out food uses. The Project would provide a total of 1,150 parking spaces within two main parking structures, including a second-level parking deck above some the single-story uses.

PARKING SUPPLY-DEMAND ANALYSIS

This parking analysis for 2nd + PCH involves determining the expected parking needs, based on the size and type of proposed development components, versus the parking supply. In general, there are several methods that can be used to estimate the site's peak parking needs. The methods used in this analysis include:

- Application of City code requirements (which typically treats each tenancy type as a “stand alone” use at maximum demand).
- Application of shared parking usage patterns by time-of-day (which recognizes that the parking demand for each tenancy type varies by time of day and day of week). The shared parking analysis starts with a code calculation for each tenancy type.

The shared parking methodology is concluded to be applicable to a development such as the 2nd + PCH because the individual land use types (i.e., retail, grocery store, food, fitness, etc.) experience peak demands at different times of the day.

CITY CODE PARKING REQUIREMENT

The code parking calculation for the Project is based on the City of Long Beach requirements as outlined in *Chapter 21.41 – Off-Street Parking and Loading Requirements* of the Municipal Code. The City's Municipal Code specifies the following parking requirement for the Project:

- Retail (community, regional or neighborhood shopping center): 5 spaces per 1,000 SF plus parking for a detached fast-food restaurant calculated separately. However, shopping centers greater than 150,000 square feet in size may receive approval of a lower parking ratio pursuant to Section 21.41.219

Based on the review of the proposed site plan and the proposed tenant mix, the Project fits the city's definition of "community, regional or neighborhood shopping center". Therefore, a parking ratio of 5 spaces per 1,000 SF has been applied to Project's development totals. **Table 2** presents the "code" parking requirements for the proposed development. As shown, the application of City parking ratios to the proposed Project results in a total parking requirement of 1,225 parking spaces. With a proposed parking supply of 1,150 spaces, a theoretical code shortfall of 75 spaces is indicated.

However, the specific tenancy mix of the Project provides an opportunity to share parking spaces based on the utilization profile of each included land use component. The following section calculates the parking requirements for the Project based on the shared parking methodology approach.

SHARED PARKING ANALYSIS

According to the Urban Land Institute's (ULI's) *Shared Parking 2nd Edition* publication, shared parking is defined as parking space that can be used to serve two or more individual land uses without conflict or encroachment. The ULI *Shared Parking* publication provides hourly parking accumulation rates for retail and restaurant uses, as well as other uses to include health club, office, cinema, hotel, etc. expressed as a percentage of the peak demand for the day.

Shared Parking Methodology

Accumulated experience in parking demand characteristics indicates that a mixing of land uses results in an overall parking need that is less than the sum of the individual peak requirements for each land use. Due to the proposed mixed-use characteristics of the proposed Project, opportunities to share parking can be expected with future full occupancy. The objective of this shared parking analysis is to forecast the peak parking requirements for the Project based on the combined demand patterns of different tenancy types at the site.

Shared parking calculations recognize that different uses often experience individual peak parking demands at different times of day, or days of the week. When uses

share common parking footprints, the total number of spaces needed to support the collective whole is determined by adding parking profiles (by time of day for weekdays versus weekend days), rather than individual peak ratios as represented in the City's Municipal Code. In that way, the shared parking approach starts from the City's own code ratios and results in the "design level" parking supply needs of a site.

It should be noted that the "demand" results of the shared parking calculation are intended to be used directly for comparison to site supply. No further adjustments or contingency additions are needed because such contingencies are already built into the peak parking ratios and time of day profiles used in the calculation.

There is an important common element between the traditional "code" and the shared parking calculation methodologies; the peak parking ratios or "highpoint" for each land use's parking profile typically equals the "code" parking ratio for that use. The analytical procedures for shared parking analyses are well documented in the *Shared Parking, 2nd Edition* publication by the Urban Land Institute (ULI).

Shared parking calculations for the proposed Project utilize hourly parking accumulations developed from field studies of single developments in free-standing settings, where travel by private auto is maximized. These characteristics permit the means for calculating peak parking needs when land use types are combined. Further, the shared parking approach illustrates how, at other than peak parking demand times, an increasing surplus of spaces will service the overall needs of the center.

Key inputs in the shared parking analysis for each land use include:

- Peak parking demand by land use for visitors and employees.
- Adjustments for alternative modes of transportation, if applicable.
- Adjustment for internal capture (captive versus non-captive parking demand), if applicable.
- Hourly variations of parking demand.
- Weekday versus weekend adjustment factors
- Monthly adjustment factors to account for variations of parking demand over the year.
- City of Long Beach Ratios per *Chapter 21.41 – Off-Street Parking and Loading Requirements* of the City's Municipal Code.

For this analysis, parking adjustments to account for (1) “walk-in/internal capture” trips attributable to synergy between uses within the Project, and (2) alternative modes of travel (i.e. carpool, vanpool, transit, bicycle, pedestrian) were not utilized to provide a conservative parking demand forecast for the proposed Project. Further yet, no monthly adjustment factors to account for variations of parking demand over the year were applied.

Shared Parking Ratios and Profiles

The hourly parking demand profiles (expressed in percent of peak demand) utilized in this analysis and applied to proposed Project are based on profiles developed by the Urban Land Institute (ULI) and published in *Shared Parking, 2nd Edition*. The ULI publication presents hourly parking demand profiles for several general land use categories, inclusive of the following five (5): retail, fine/casual dining, fast-food restaurant, family restaurant and health club. These profiles of parking demand have been used directly, by land use type, in the analysis of this site. Please note that the profile for retail was applied to the grocery store use, while the family restaurant profile was applied to the ready-to-eat restaurant use.

One of the primary components for proposed Project is retail space; the ULI retail use profiles are applied directly. In doing so, there is an intermediate step in expressing ULI profiles as a percentage of the week-long peak, thus arriving at a weekday profile and weekend profile each expressed as a percentage of the baseline parking ratio (ULI actually starts with separate ratios for weekday and weekend day, and develops profiles for each accordingly; we’ve found it more convenient to translate both profiles to a percent of expected maximum demand, which, for retail, turns out to be on a Saturday). The resulting profiles represent the most likely hourly parking demand profile, and are applied to the City’s retail parking ratio of 4 spaces per 1000 SF of GFA. Peak demand for retail uses occurs between 1:00 PM–2:00 PM on weekdays, and 2:00 PM–4:00 PM on weekends.

The ULI *Shared Parking* publication includes several categories for restaurants. For this analysis, the parking profile for fine/casual dining restaurant, family restaurant and fast-food restaurant were all utilized as each of the categories match the proposed restaurant tenant mix of the Project. Per ULI, fine dining restaurants are distinguished by several characteristics to include more leisurely dining, with a lower turnover and higher price points; reservations are typically accepted. Few serve breakfast, and some may or may not serve lunch. Some include a lounge or bar area. Casual dining facilities are moderately priced and general do not accept reservations; they commonly serve lunch and dinner, and may serve breakfast. The typical length of

stay is about an hour. Family restaurants are typically lower priced, do not accept reservations, and lack bars or lounges, although some may serve bottled beer or wine with meals (ITE calls the High-Turnover Restaurants without Bars). Many serve breakfast as well as lunch and dinner, and many offer both carryout and dine-in options. Examples include cafeteria-style restaurants, pancake houses and moderately-priced ethnic restaurants.

Like the retail profiles, the restaurant profiles are derived exactly from the ULI baseline. The restaurant-parking ratio utilized in this analysis exactly matches the City code rate of 10 spaces per 1000 SF of floor area for those tenants where food consumption is primarily on-site. According to the *Shared Parking* publication, casual/fining dining restaurant uses are shown to experience peak demand between 7:00 PM and 10:00 PM on weekdays, and 8:00 PM and 9:00 PM on weekends, whereas a family restaurant use peak demand occurs between 12:00 PM and 1:00 PM on weekdays and weekends.

The fast-food restaurant profile, as contained in the ULI *Shared Parking* publication, was utilized in this analysis to estimate the hourly parking demand of the Ready To Eat/Take Out food uses. To estimate the parking demand for these uses, a parking ratio of 4 spaces per 100 SF (which matches City code) is utilized for those tenants/uses where food consumption is primarily away from the premises. For fast-food uses peak demand occurs between 12:00 PM and 2:00 PM on weekdays and weekends.

The health club profiles were also directly derived from ULI. For health clubs, the peak demand occurs between 6:00 PM - 7:00 PM on weekdays and 5:00 PM - 6:00 PM on weekends. To estimate the parking demand for the proposed Project, a parking ratio of five spaces plus 4 spaces per 1,000 SF (which matches City code) is utilized.

Application of Shared Parking Methodology

Tables 3 and **4** presents the weekday and weekend parking demand profiles for the proposed Project based on the shared parking methodology, assuming full occupancy of the proposed tenant mix.

Review of **Tables 3** and **4** indicates that the future full occupancy weekday peak parking demands will occur at 7:00 PM with peak demands of 1,131 spaces. Based on the existing parking supply of 1,150 spaces, the peak demand hours on a weekday will yield a surplus of 19 spaces. On a weekend the peak parking demand will occur at 6:00 PM with a peak demand of 1,134 spaces resulting in a surplus of 16 spaces.

Figures 3 and 4 graphically illustrate the weekday and weekend hourly parking demand forecast for the Project, respectively. Each land use component and its corresponding hourly Shared Parking demand for various mixes of uses, which were presented in *Tables 3 and 4*, are depicted in these two figures relative to a shared parking supply of 1,150 spaces. A review of these figures indicate that the Project's proposed parking supply of 1,150 spaces will adequately accommodate the proposed Project's weekday and weekend hourly shared parking demand for all morning, midday, afternoon and evening hours.

Therefore, we conclude that there is adequate parking on site to accommodate the Project's proposed tenant mix. Based on LLG's experience, the results presented as part of the share parking assessment represent the most pragmatic approach to future parking conditions.

PARKING MANAGEMENT PLAN

This Parking Management Plan (PMP) outlines the proposed allocation of parking supply on site and key parking management strategies to maximize the availability of parking for customers and employees of the retail center component and medical plaza component of the proposed 2nd + PCH Project.

As noted above, the results of the shared parking analysis for the Project indicates that the proposed parking supply of 1,150 spaces will be sufficient to accommodate the peak parking demand of a 245,000 SF mixed-use shopping center with the following mix of uses/tenants:

- ❑ 95,000 SF of retail shop space,
- ❑ 55,000 SF grocery store
- ❑ 40,000 SF of fine/casual dining restaurant uses,
- ❑ 25,000 SF of high-turnover/family restaurants uses,
- ❑ 5,000 SF of ready to eat/take-out food uses, and
- ❑ 25,000 SF health/fitness club space,

PMP measures

Specific PMP measures relative to the employee parking operation and short-term parking for customers are described below, and were developed based on the following objectives:

- The PMP should identify where the employees park within the site. Approximately 200 to 220 spaces will be required to accommodate the parking demand of employees of the retail center during the weekday and weekend peak hours.
 - The PMP should identify where location of short-term parking spaces for service retail uses and/or food uses (take-out/curb side service, etc.).
1. Centercal Properties, LLC work with tenants of the retail center to implement an employee parking program, with the goal of providing convenient and accessible shopping experience for the customers of the retail center and to leave the most desirable parking spaces within the parking structure for use by customers. The location of designated employee parking spaces will be developed in collaboration between Centercal Properties, LLC and the tenants. The employee parking spaces will be identified with a white or yellow circle. It is noted that these spaces will be open for customer use.
 2. Centercal Properties, LLC will work with tenants of the retail center to identify the need for “short term/time restricted spaces” on an as need basis, dependent on the needs of the proposed retail and/or food use. The short-term spaces may be used for “curbside/take out” and/or for service retail-type users. The number and location of spaces will be determined by Centercal Properties, LLC and the potential tenants.

Centercal Properties, LLC will work closely with the tenants to insure that both employees and property management work together to provide the best shopping experience for the customers, as well as allowing the most desirable parking spaces to be accessed by the customers rather than the employees.



SUMMARY OF FINDINGS AND CONCLUSIONS

1. The Project includes development of 245,000 square feet (SF) of retail/commercial floor area, including 95,000 SF of retail uses, a 55,000 SF grocery store, a 25,000 SF fitness/health club, and 70,000 SF of restaurant uses consisting of 40,000 SF of full service dining, 25,000 SF of high-turnover restaurant/fast-food uses and 5,000 SF of ready to eat/take-out food. The Project would provide a total of 1,150 parking spaces within two main parking structures, including a second-level parking deck above some the single-story uses.
2. Direct application of City parking codes to the proposed tenant mix results in a total parking requirement of 1,225 parking spaces. With a proposed parking supply of 1,150 spaces, a code deficiency of 75 spaces is calculated.
3. Given the mix of center tenancies, a shared parking analysis has been prepared and indicates that the proposed parking supply for the Project will be sufficient to meet the projected peak parking demands of the proposed uses. The weekday scenario results in a minimum surplus of 19 spaces, while the weekend scenario results in a minimum surplus of 16 spaces.

* * * * *

We appreciate the opportunity to prepare this analysis for the proposed 2nd + PCH Project. Should you have any questions or need additional assistance, please do not hesitate to call Shane Green or me at (949) 825-6175.

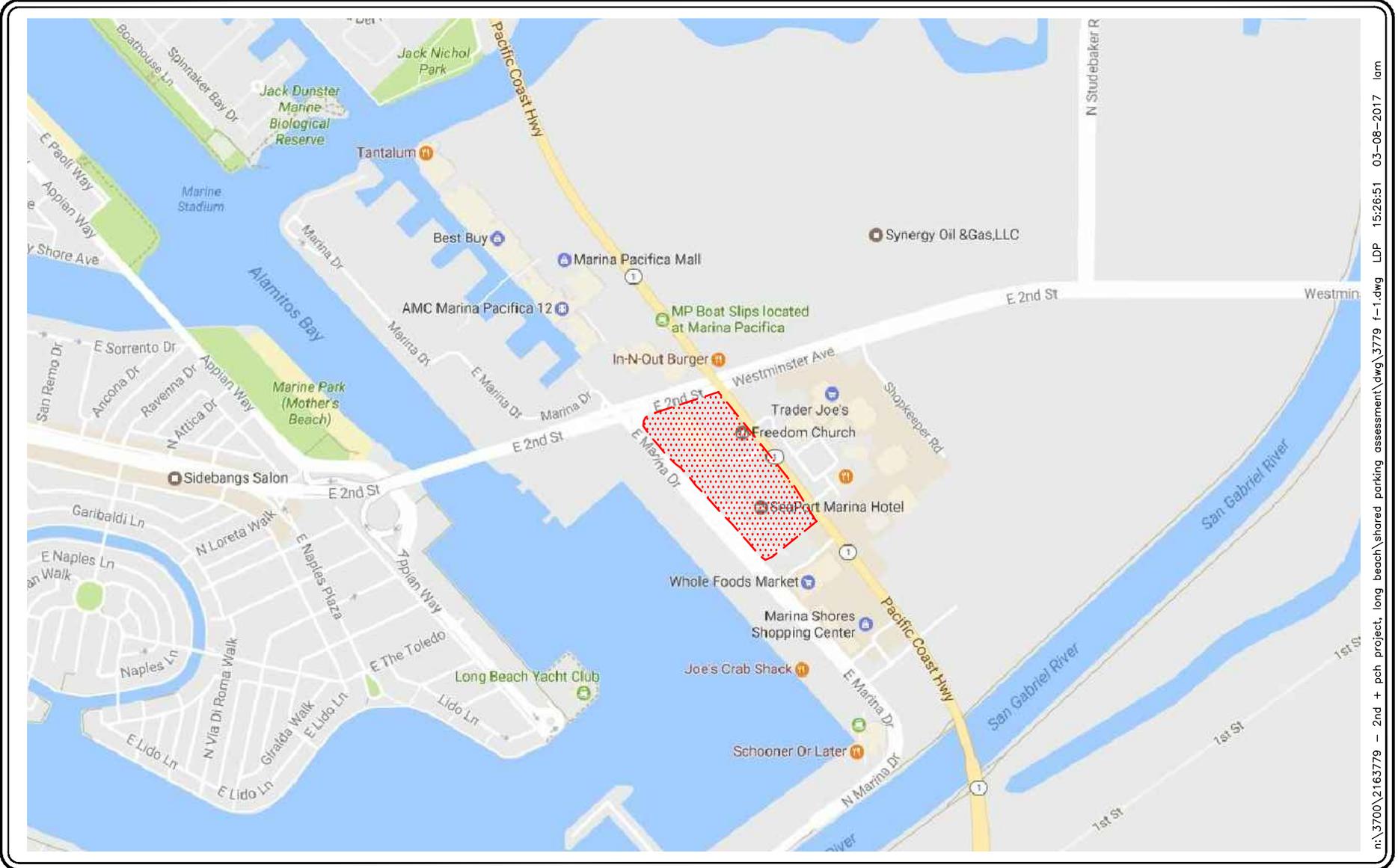
Very truly yours,
Linscott, Law & Greenspan, Engineers

A handwritten signature in blue ink, appearing to read "R. Barretto", is written over the typed name.

Richard E. Barretto, P.E.
Principal

Attachments

cc: File
Shane S. Green, P.E., LLG



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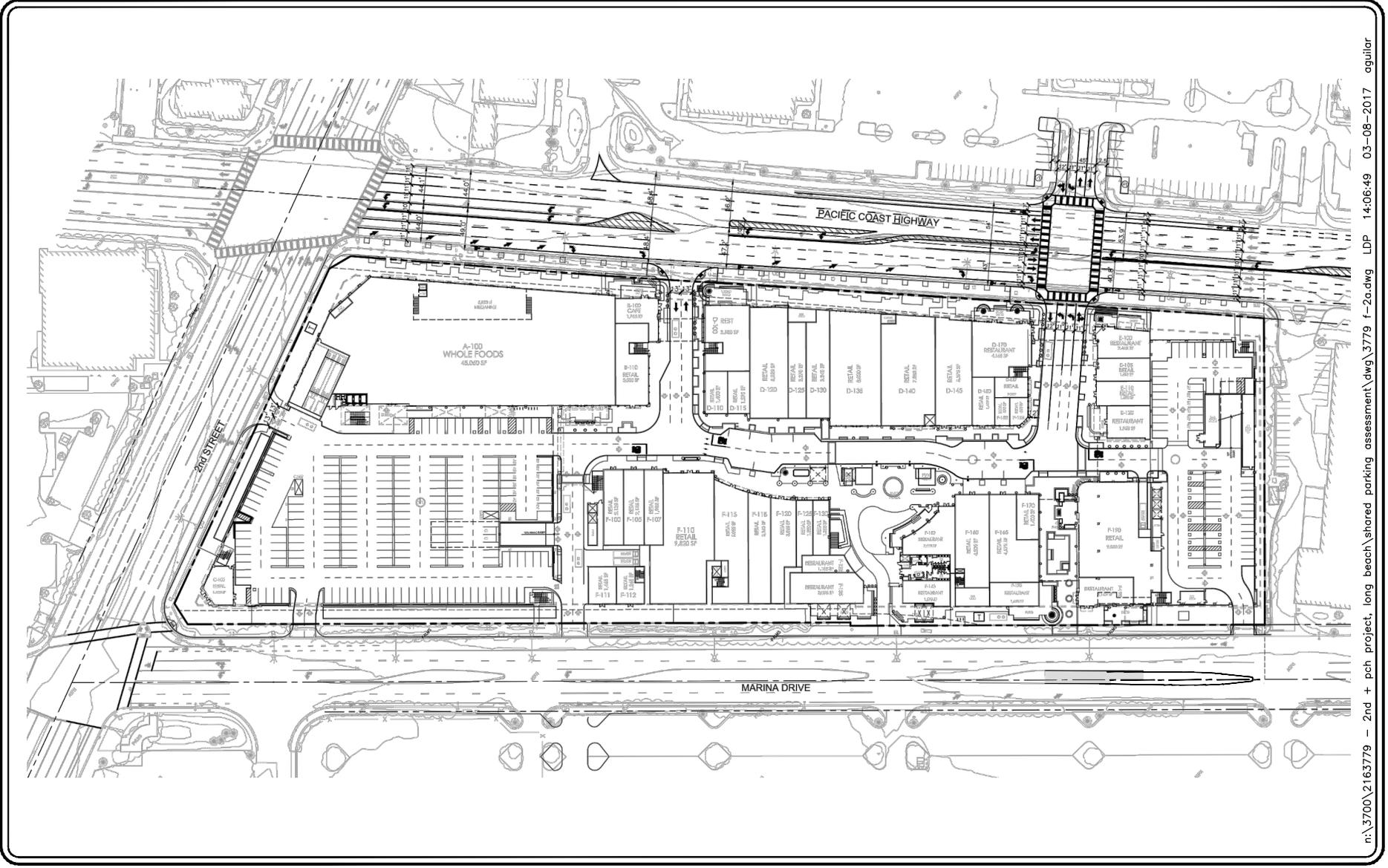
**LINSCOTT
LAW &
GREENSPAN**

 NO SCALE
engineers

SOURCE: GOOGLE
 KEY
 = PROJECT SITE

FIGURE 1

VICINITY MAP
 2ND + PCH PROJECT, LONG BEACH



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SOURCE: CENTRAL PROPERTIES, INC.

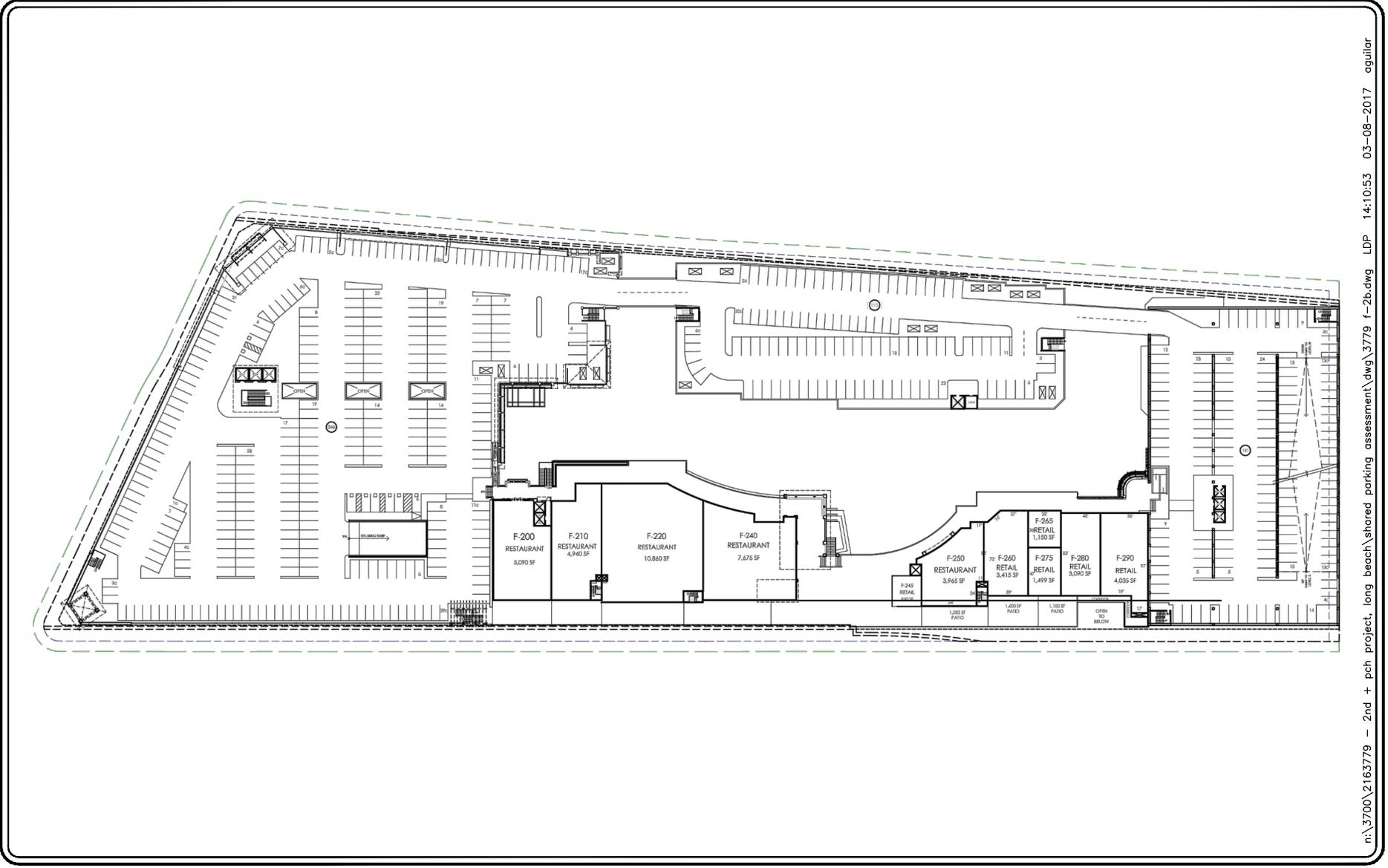
FIGURE 2A

PROPOSED SITE PLAN – LEVEL 1
2ND + PCH PROJECT, LONG BEACH

LINSCOTT
LAW &
GREENSPAN
engineers



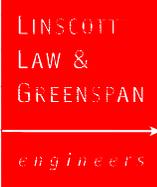
NO SCALE



SOURCE: CENTRAL PROPERTIES, INC.

FIGURE 2B

PROPOSED SITE PLAN - LEVEL 2 2ND + PCH PROJECT, LONG BEACH



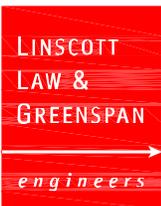
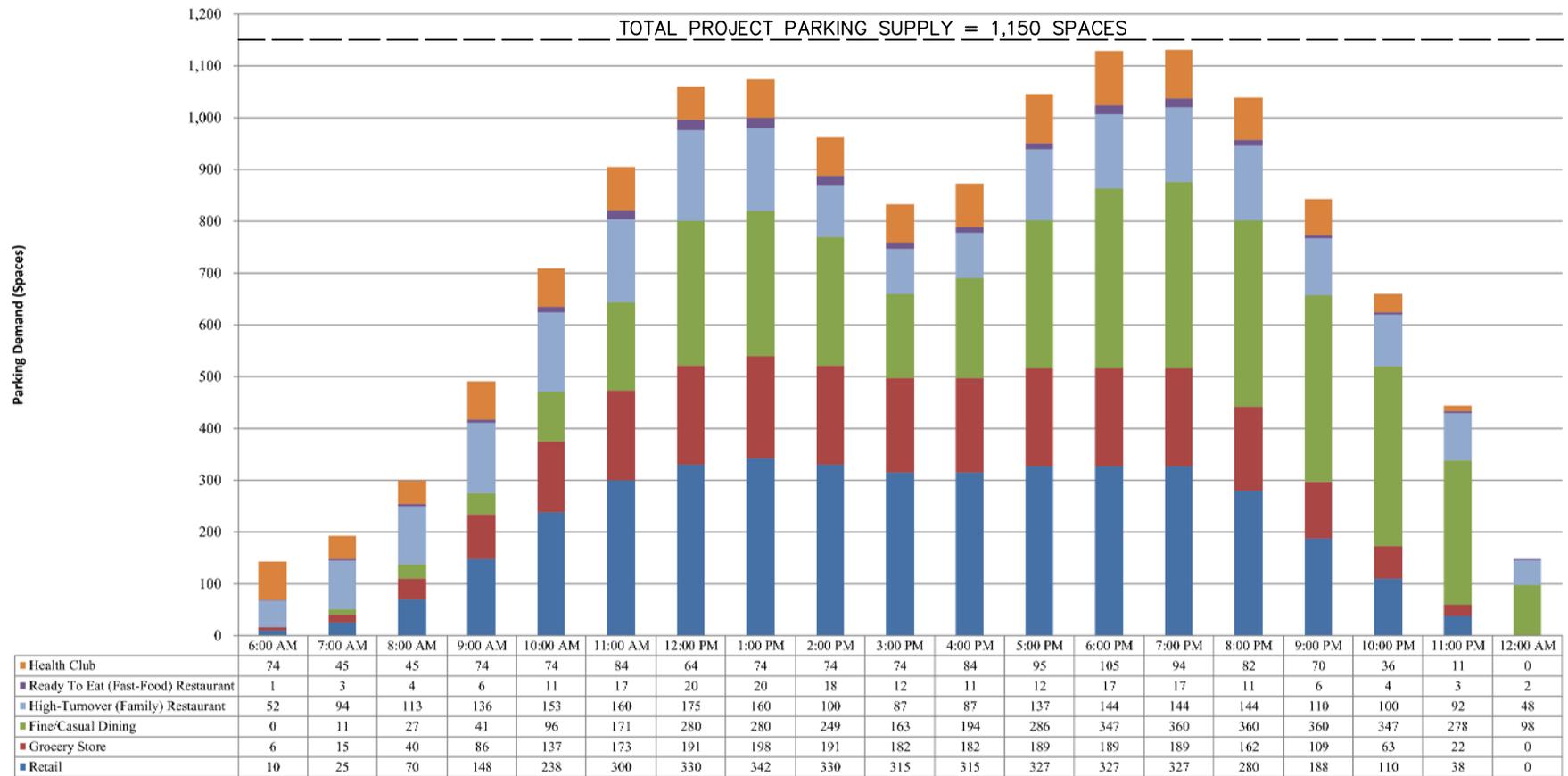


FIGURE 3

WEEKDAY SHARED PARKING DEMAND PROFILE
2ND + PCH PROJECT, LONG BEACH

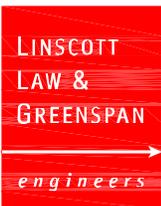
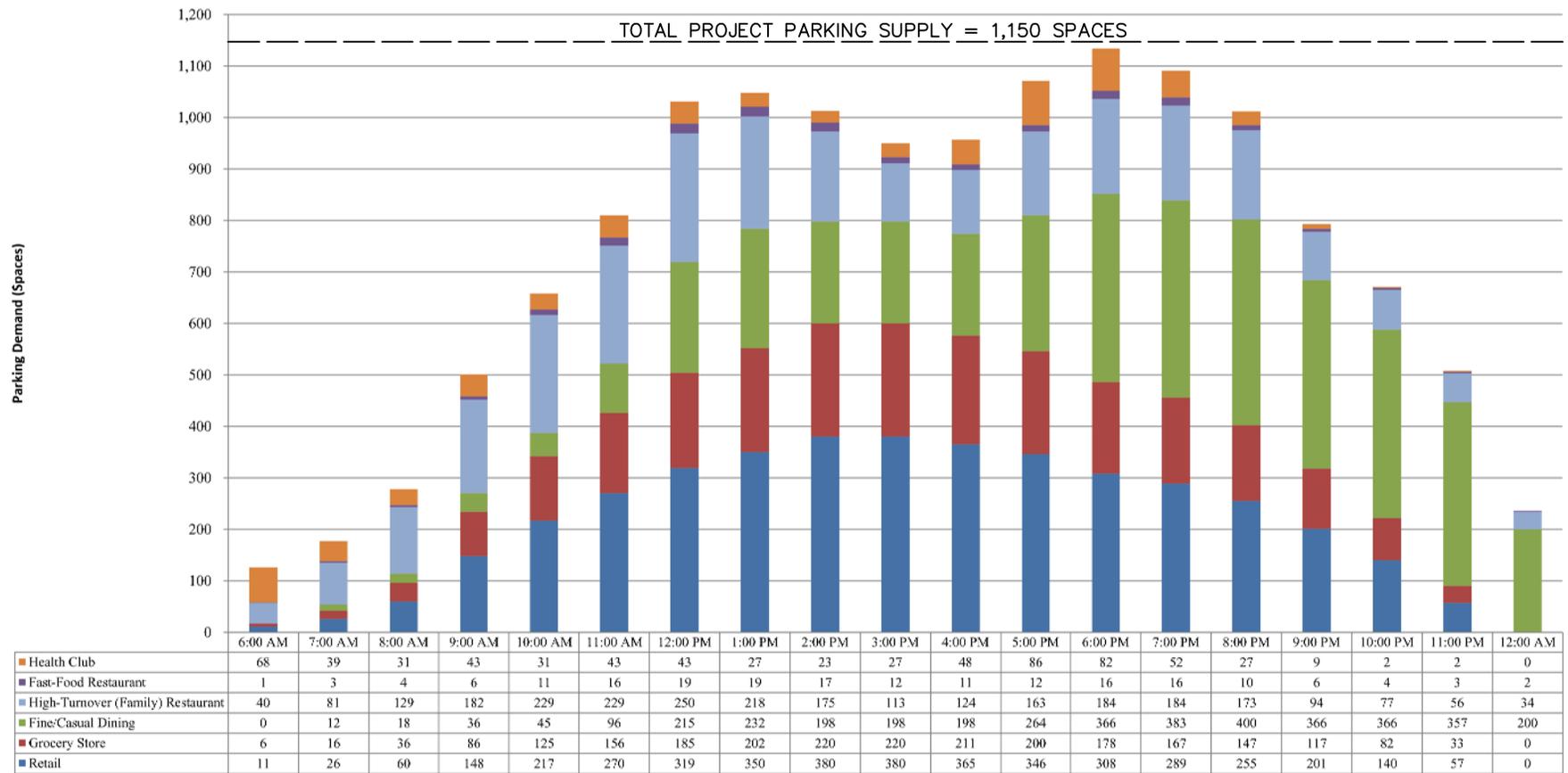


FIGURE 4

WEEKEND SHARED PARKING DEMAND PROFILE
2ND + PCH PROJECT, LONG BEACH

TABLE 1
PROJECT DEVELOPMENT SUMMARY²
2ND + PCH PROJECT, LONG BEACH

Land Use / Project Description	Project Development Totals Gross Floor Area (SF)
<input type="checkbox"/> Retail Sales	95,000 SF
<input type="checkbox"/> Grocery Store	55,000 SF
<input type="checkbox"/> Restaurant – Full Service	40,000 SF
<input type="checkbox"/> Restaurant – Fast Food/High-Turnover	25,000 SF
<input type="checkbox"/> Restaurant – Ready To Eat/Take Out	5,000 SF
<input type="checkbox"/> Fitness/Health Club	25,000 SF
Total Floor Area (Maximum)	245,000 SF
<input type="checkbox"/> Parking Supply	1,150 spaces

² Source: Eyestone Environmental

TABLE 2
CITY CODE PARKING REQUIREMENTS³
2ND + PCH PROJECT, LONG BEACH

Land Use	Square-feet of Gross Floor Area (SF – GFA)	City of Long Beach Code Parking Ratio	Spaces Required
<i>Proposed Tenant Mix</i>			
<input type="checkbox"/> Retail Sales	95,000 SF	<i>Community, Regional or Neighborhood Shopping Centers</i> 5 space per 1,000 SF of GFA	475
<input type="checkbox"/> Grocery Store	55,000 SF	5 space per 1,000 SF of GFA	275
<input type="checkbox"/> Restaurant – Full Service	40,000 SF	5 space per 1,000 SF of GFA	200
<input type="checkbox"/> Restaurant – Fast Food/High-Turnover	25,000 SF	5 space per 1,000 SF of GFA	125
<input type="checkbox"/> Restaurant – Ready To Eat/Take-Out	5,000 SF	5 space per 1,000 SF of GFA	25
<input type="checkbox"/> Fitness/Health Club	25,000 SF	5 space per 1,000 SF of GFA	125
		<i>Total</i>	<i>1,225</i>
Total Floor Area	245,000 SF	Total Code Parking Requirement:	1,225
			Proposed Parking Supply: 1,150
			Parking Surplus/Deficiency (+/-): -75

³ Source: City of Long Beach Municipal Code, Chapter 21.41 – Off-Street Parking and Loading Requirements.

TABLE 3
WEEKDAY SHARED PARKING DEMAND ANALYSIS⁴
2ND + PCH PROJECT, LONG BEACH

Land Use	Retail	Grocery Store	Fine/Casual Dining	High-Turnover (Family) Restaurant	Ready To Eat (Fast-Food) Restaurant	Health Club	Shared Parking Demand	Comparison w/ Parking Supply 1150 Spaces Surplus (Deficiency)
Size Pkg Rate[1]	95.000 KSF 4 /KSF	55.000 KSF 4 /KSF	40.000 KSF 10 /KSF	25.000 KSF 10 /KSF	5.000 KSF 4 /KSF	25.000 KSF 5 sp + 4 /KSF		
Gross Spaces	380 Spc.	220 Spc.	400 Spc.	250 Spc.	20 Spc.	105 Spc.		
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces		
6:00 AM	10	6	0	52	1	74	143	1,007
7:00 AM	25	15	11	94	3	45	193	957
8:00 AM	70	40	27	113	4	45	299	851
9:00 AM	148	86	41	136	6	74	491	659
10:00 AM	238	137	96	153	11	74	709	441
11:00 AM	300	173	171	160	17	84	905	245
12:00 PM	330	191	280	175	20	64	1,060	90
1:00 PM	342	198	280	160	20	74	1,074	76
2:00 PM	330	191	249	100	18	74	962	188
3:00 PM	315	182	163	87	12	74	833	317
4:00 PM	315	182	194	87	11	84	873	277
5:00 PM	327	189	286	137	12	95	1,046	104
6:00 PM	327	189	347	144	17	105	1,129	21
7:00 PM	327	189	360	144	17	94	1,131	19
8:00 PM	280	162	360	144	11	82	1,039	111
9:00 PM	188	109	360	110	6	70	843	307
10:00 PM	110	63	347	100	4	36	660	490
11:00 PM	38	22	278	92	3	11	444	706
12:00 AM	0	0	98	48	2	0	148	1,002

Notes:

[1] Parking rates for all land uses based on City code.

⁴ Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

TABLE 4
WEEKEND SHARED PARKING DEMAND ANALYSIS⁵
2ND + PCH PROJECT, LONG BEACH

Land Use	Retail	Grocery Store	Fine/Casual Dining	High-Turnover (Family) Restaurant	Ready To Eat (Fast-Food) Restaurant	Health Club	Shared Parking Demand	Comparison w/ Parking Supply 1150 Spaces Surplus (Deficiency)
Size Pkg Rate[1]	95.000 KSF 4 /KSF	55.000 KSF 4 /KSF	40.000 KSF 10 /KSF	25.000 KSF 10 /KSF	5.000 KSF 4 /KSF	25.000 KSF 5 sp + 4 /KSF		
Gross Spaces	380 Spc.	220 Spc.	400 Spc.	250 Spc.	20 Spc.	105 Spc.		
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces		
6:00 AM	11	6	0	40	1	68	126	1,024
7:00 AM	26	16	12	81	3	39	177	973
8:00 AM	60	36	18	129	4	31	278	872
9:00 AM	148	86	36	182	6	43	501	649
10:00 AM	217	125	45	229	11	31	658	492
11:00 AM	270	156	96	229	16	43	810	340
12:00 PM	319	185	215	250	19	43	1,031	119
1:00 PM	350	202	232	218	19	27	1,048	102
2:00 PM	380	220	198	175	17	23	1,013	137
3:00 PM	380	220	198	113	12	27	950	200
4:00 PM	365	211	198	124	11	48	957	193
5:00 PM	346	200	264	163	12	86	1,071	79
6:00 PM	308	178	366	184	16	82	1,134	16
7:00 PM	289	167	383	184	16	52	1,091	59
8:00 PM	255	147	400	173	10	27	1,012	138
9:00 PM	201	117	366	94	6	9	793	357
10:00 PM	140	82	366	77	4	2	671	479
11:00 PM	57	33	357	56	3	2	508	642
12:00 AM	0	0	200	34	2	0	236	914

Notes:

[1] Parking rates for all land uses based on City code.

⁵ Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

APPENDIX A
SHARED PARKING DEMAND WORKSHEETS

Appendix Table A1

SHOPPING CENTER (TYPICAL DAYS)
WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Shopping Center (Typical Days)				
Size	95.000 KSF				Shared Parking Demand
Pkg Rate[2]	4 /KSF				
Mode Adjust	1.00			1.00	
Non-Captive Ratio	1.00			1.00	
Gross Spaces	380 Spaces				
	306 Guest Spc.		74 Emp. Spc.		
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces	
6:00 AM	1%	3	9%	7	10
7:00 AM	5%	15	14%	10	25
8:00 AM	14%	43	36%	27	70
9:00 AM	32%	98	68%	50	148
10:00 AM	59%	181	77%	57	238
11:00 AM	77%	236	86%	64	300
12:00 PM	86%	263	90%	67	330
1:00 PM	90%	275	90%	67	342
2:00 PM	86%	263	90%	67	330
3:00 PM	81%	248	90%	67	315
4:00 PM	81%	248	90%	67	315
5:00 PM	86%	263	86%	64	327
6:00 PM	86%	263	86%	64	327
7:00 PM	86%	263	86%	64	327
8:00 PM	72%	220	81%	60	280
9:00 PM	45%	138	68%	50	188
10:00 PM	27%	83	36%	27	110
11:00 PM	9%	28	14%	10	38
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A2

SHOPPING CENTER (TYPICAL DAYS)
WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Shopping Center (Typical Days)					
Size	95.000 KSF				Shared Parking Demand	
Pkg Rate[2]	4 /KSF					
Mode Adjust	1.00			1.00		
Non-Captive Ratio	1.00			1.00		
Gross Spaces	380 Spaces					
	304 Guest Spc.		76 Emp. Spc.			
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces		
6:00 AM	1%	3	10%	8		11
7:00 AM	5%	15	15%	11		26
8:00 AM	10%	30	40%	30		60
9:00 AM	30%	91	75%	57	148	
10:00 AM	50%	152	85%	65	217	
11:00 AM	65%	198	95%	72	270	
12:00 PM	80%	243	100%	76	319	
1:00 PM	90%	274	100%	76	350	
2:00 PM	100%	304	100%	76	380	
3:00 PM	100%	304	100%	76	380	
4:00 PM	95%	289	100%	76	365	
5:00 PM	90%	274	95%	72	346	
6:00 PM	80%	243	85%	65	308	
7:00 PM	75%	228	80%	61	289	
8:00 PM	65%	198	75%	57	255	
9:00 PM	50%	152	65%	49	201	
10:00 PM	35%	106	45%	34	140	
11:00 PM	15%	46	15%	11	57	
12:00 AM	0%	0	0%	0	0	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A3

GROCERY STORE - SHOPPING CENTER (TYPICAL DAYS)
WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Grocery Store - Shopping Center (Typical Days)				
Size	55.000 KSF				Shared Parking Demand
Pkg Rate[2]	4 /KSF				
Mode Adjust	1.00			1.00	
Non-Captive Ratio	1.00			1.00	
Gross Spaces	220 Spaces				
	177 Guest Spc.		43 Emp. Spc.		
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces	
6:00 AM	1%	2	9%	4	6
7:00 AM	5%	9	14%	6	15
8:00 AM	14%	25	36%	15	40
9:00 AM	32%	57	68%	29	86
10:00 AM	59%	104	77%	33	137
11:00 AM	77%	136	86%	37	173
12:00 PM	86%	152	90%	39	191
1:00 PM	90%	159	90%	39	198
2:00 PM	86%	152	90%	39	191
3:00 PM	81%	143	90%	39	182
4:00 PM	81%	143	90%	39	182
5:00 PM	86%	152	86%	37	189
6:00 PM	86%	152	86%	37	189
7:00 PM	86%	152	86%	37	189
8:00 PM	72%	127	81%	35	162
9:00 PM	45%	80	68%	29	109
10:00 PM	27%	48	36%	15	63
11:00 PM	9%	16	14%	6	22
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A4

GROCERY STORE - SHOPPING CENTER (TYPICAL DAYS)
WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Grocery Store - Shopping Center (Typical Days)					
Size	55.000 KSF				Shared Parking Demand	
Pkg Rate[2]	4 /KSF					
Mode Adjust	1.00			1.00		
Non-Captive Ratio	1.00			1.00		
Gross Spaces	220 Spaces					
	176 Guest Spc.		44 Emp. Spc.			
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces		
6:00 AM	1%	2	10%	4		6
7:00 AM	5%	9	15%	7		16
8:00 AM	10%	18	40%	18		36
9:00 AM	30%	53	75%	33	86	
10:00 AM	50%	88	85%	37	125	
11:00 AM	65%	114	95%	42	156	
12:00 PM	80%	141	100%	44	185	
1:00 PM	90%	158	100%	44	202	
2:00 PM	100%	176	100%	44	220	
3:00 PM	100%	176	100%	44	220	
4:00 PM	95%	167	100%	44	211	
5:00 PM	90%	158	95%	42	200	
6:00 PM	80%	141	85%	37	178	
7:00 PM	75%	132	80%	35	167	
8:00 PM	65%	114	75%	33	147	
9:00 PM	50%	88	65%	29	117	
10:00 PM	35%	62	45%	20	82	
11:00 PM	15%	26	15%	7	33	
12:00 AM	0%	0	0%	0	0	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A5

FINE/CASUAL DINING
WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Fine/Casual Dining				
Size	40.000 KSF				Shared Parking Demand
Pkg Rate[2]	10 /KSF				
Mode Adjust	1.00	1.00			
Non-Captive Ratio	1.00	1.00			
Gross Spaces	400 Spaces				
	339 Guest Spc.		61 Emp. Spc.		
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces	
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	18%	11	11
8:00 AM	0%	0	45%	27	27
9:00 AM	0%	0	68%	41	41
10:00 AM	14%	47	81%	49	96
11:00 AM	36%	122	81%	49	171
12:00 PM	68%	231	81%	49	280
1:00 PM	68%	231	81%	49	280
2:00 PM	59%	200	81%	49	249
3:00 PM	36%	122	68%	41	163
4:00 PM	45%	153	68%	41	194
5:00 PM	68%	231	90%	55	286
6:00 PM	86%	292	90%	55	347
7:00 PM	90%	305	90%	55	360
8:00 PM	90%	305	90%	55	360
9:00 PM	90%	305	90%	55	360
10:00 PM	86%	292	90%	55	347
11:00 PM	68%	231	77%	47	278
12:00 AM	23%	78	32%	20	98

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A6

FINE/CASUAL DINING
WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Fine/Casual Dining				
Size	40.000 KSF				Shared Parking Demand
Pkg Rate[2]	10 /KSF				
Mode Adjust	1.00	1.00			
Non-Captive Ratio	1.00	1.00			
Gross Spaces	400 Spaces				
	340 Guest Spc.		60 Emp. Spc.		
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces	
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	20%	12	12
8:00 AM	0%	0	30%	18	18
9:00 AM	0%	0	60%	36	36
10:00 AM	0%	0	75%	45	45
11:00 AM	15%	51	75%	45	96
12:00 PM	50%	170	75%	45	215
1:00 PM	55%	187	75%	45	232
2:00 PM	45%	153	75%	45	198
3:00 PM	45%	153	75%	45	198
4:00 PM	45%	153	75%	45	198
5:00 PM	60%	204	100%	60	264
6:00 PM	90%	306	100%	60	366
7:00 PM	95%	323	100%	60	383
8:00 PM	100%	340	100%	60	400
9:00 PM	90%	306	100%	60	366
10:00 PM	90%	306	100%	60	366
11:00 PM	90%	306	85%	51	357
12:00 AM	50%	170	50%	30	200

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A7

FAMILY RESTAURANT
WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Family Restaurant				
Size	25.000 KSF				Shared Parking Demand
Pkg Rate[2]	10 /KSF				
Mode Adjust	1.00			1.00	
Non-Captive Ratio	1.00			1.00	
Gross Spaces	250 Spaces				
	214 Guest Spc.		36 Emp. Spc.		
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces	
6:00 AM	18%	39	35%	13	52
7:00 AM	35%	75	53%	19	94
8:00 AM	42%	90	63%	23	113
9:00 AM	53%	113	63%	23	136
10:00 AM	60%	128	70%	25	153
11:00 AM	63%	135	70%	25	160
12:00 PM	70%	150	70%	25	175
1:00 PM	63%	135	70%	25	160
2:00 PM	35%	75	70%	25	100
3:00 PM	32%	68	53%	19	87
4:00 PM	32%	68	53%	19	87
5:00 PM	53%	113	67%	24	137
6:00 PM	56%	120	67%	24	144
7:00 PM	56%	120	67%	24	144
8:00 PM	56%	120	67%	24	144
9:00 PM	42%	90	56%	20	110
10:00 PM	39%	83	46%	17	100
11:00 PM	35%	75	46%	17	92
12:00 AM	18%	39	25%	9	48

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A8

FAMILY RESTAURANT
WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Family Restaurant				
Size	25.000 KSF				Shared Parking Demand
Pkg Rate[2]	10 /KSF				
Mode Adjust	1.00			1.00	
Non-Captive Ratio	1.00			1.00	
Gross Spaces	250 Spaces				
	213 Guest Spc.		37 Emp. Spc.		
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces	
6:00 AM	10%	21	50%	19	40
7:00 AM	25%	53	75%	28	81
8:00 AM	45%	96	90%	33	129
9:00 AM	70%	149	90%	33	182
10:00 AM	90%	192	100%	37	229
11:00 AM	90%	192	100%	37	229
12:00 PM	100%	213	100%	37	250
1:00 PM	85%	181	100%	37	218
2:00 PM	65%	138	100%	37	175
3:00 PM	40%	85	75%	28	113
4:00 PM	45%	96	75%	28	124
5:00 PM	60%	128	95%	35	163
6:00 PM	70%	149	95%	35	184
7:00 PM	70%	149	95%	35	184
8:00 PM	65%	138	95%	35	173
9:00 PM	30%	64	80%	30	94
10:00 PM	25%	53	65%	24	77
11:00 PM	15%	32	65%	24	56
12:00 AM	10%	21	35%	13	34

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A9

FAST-FOOD RESTAURANT
WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Fast-Food Restaurant				
Size	5.000 KSF				Shared Parking Demand
Pkg Rate[2]	4 /KSF				
Mode Adjust	1.00			1.00	
Non-Captive Ratio	1.00			1.00	
Gross Spaces	20 Spaces				
	17 Guest Spc.		3 Emp. Spc.		
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces	
6:00 AM	5%	1	15%	0	1
7:00 AM	10%	2	20%	1	3
8:00 AM	20%	3	30%	1	4
9:00 AM	30%	5	40%	1	6
10:00 AM	55%	9	75%	2	11
11:00 AM	85%	14	100%	3	17
12:00 PM	100%	17	100%	3	20
1:00 PM	100%	17	100%	3	20
2:00 PM	90%	15	95%	3	18
3:00 PM	60%	10	70%	2	12
4:00 PM	55%	9	60%	2	11
5:00 PM	60%	10	70%	2	12
6:00 PM	85%	14	90%	3	17
7:00 PM	80%	14	90%	3	17
8:00 PM	50%	9	60%	2	11
9:00 PM	30%	5	40%	1	6
10:00 PM	20%	3	30%	1	4
11:00 PM	10%	2	20%	1	3
12:00 AM	5%	1	20%	1	2

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A10

FAST-FOOD RESTAURANT
WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Fast-Food Restaurant				
Size	5.000 KSF				Shared Parking Demand
Pkg Rate[2]	4 /KSF				
Mode Adjust	1.00			1.00	
Non-Captive Ratio	1.00			1.00	
Gross Spaces	20 Spaces				
	17 Guest Spc.		3 Emp. Spc.		
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces	
6:00 AM	5%	1	14%	0	1
7:00 AM	9%	2	19%	1	3
8:00 AM	19%	3	28%	1	4
9:00 AM	28%	5	37%	1	6
10:00 AM	51%	9	70%	2	11
11:00 AM	79%	13	93%	3	16
12:00 PM	93%	16	93%	3	19
1:00 PM	93%	16	93%	3	19
2:00 PM	84%	14	89%	3	17
3:00 PM	56%	10	65%	2	12
4:00 PM	51%	9	56%	2	11
5:00 PM	56%	10	65%	2	12
6:00 PM	79%	13	84%	3	16
7:00 PM	75%	13	84%	3	16
8:00 PM	47%	8	56%	2	10
9:00 PM	28%	5	37%	1	6
10:00 PM	19%	3	28%	1	4
11:00 PM	9%	2	19%	1	3
12:00 AM	5%	1	19%	1	2

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A11

HEALTH CLUB
WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Health Club					
Size	25.000 KSF				Shared Parking Demand	
Pkg Rate[2]	5 sp + 4 --					
Mode Adjust	1.00			1.00		
Non-Captive Ratio	1.00			1.00		
Gross Spaces	105 Spaces					
	99 Guest Spc.		6 Emp. Spc.			
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces		
6:00 AM	70%	69	75%	5		74
7:00 AM	40%	40	75%	5		45
8:00 AM	40%	40	75%	5		45
9:00 AM	70%	69	75%	5	74	
10:00 AM	70%	69	75%	5	74	
11:00 AM	80%	79	75%	5	84	
12:00 PM	60%	59	75%	5	64	
1:00 PM	70%	69	75%	5	74	
2:00 PM	70%	69	75%	5	74	
3:00 PM	70%	69	75%	5	74	
4:00 PM	80%	79	75%	5	84	
5:00 PM	90%	89	100%	6	95	
6:00 PM	100%	99	100%	6	105	
7:00 PM	90%	89	75%	5	94	
8:00 PM	80%	79	50%	3	82	
9:00 PM	70%	69	20%	1	70	
10:00 PM	35%	35	20%	1	36	
11:00 PM	10%	10	20%	1	11	
12:00 AM	0%	0	0%	0	0	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table A12

HEALTH CLUB
WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Land Use	Health Club					
Size	25.000 KSF				Shared Parking Demand	
Pkg Rate[2]	5 sp + 4 --					
Mode Adjust	1.00			1.00		
Non-Captive Ratio	1.00			1.00		
Gross Spaces	105 Spaces					
	100 Guest Spc.		5 Emp. Spc.			
Time of Day	% Of Peak [3]	# Of Spaces	% Of Peak [3]	# Of Spaces		
6:00 AM	66%	66	41%	2		68
7:00 AM	37%	37	41%	2		39
8:00 AM	29%	29	41%	2		31
9:00 AM	41%	41	41%	2	43	
10:00 AM	29%	29	41%	2	31	
11:00 AM	41%	41	41%	2	43	
12:00 PM	41%	41	41%	2	43	
1:00 PM	25%	25	41%	2	27	
2:00 PM	21%	21	41%	2	23	
3:00 PM	25%	25	41%	2	27	
4:00 PM	45%	45	62%	3	48	
5:00 PM	82%	82	82%	4	86	
6:00 PM	78%	78	82%	4	82	
7:00 PM	49%	49	62%	3	52	
8:00 PM	25%	25	41%	2	27	
9:00 PM	8%	8	16%	1	9	
10:00 PM	1%	1	16%	1	2	
11:00 PM	1%	1	16%	1	2	
12:00 AM	0%	0	0%	0	0	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Parking rates for all land uses based on City code.

[3] Percentage of peak parking demand factors reflect relationships between weekday parking demand ratios and peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.