

February 7, 2024

Pastor Robert Chavez
Victory Outreach Church
3300 E. Willow Street
Signal Hill, CA 90755
T: 310-697-6384
E: yosp@sbcglobal.net

RE: PARKING STUDY FOR VICTORY OUTREACH CHURCH, SIGNAL HILL, CA.

Dear Pastor Chavez.

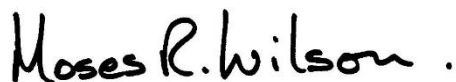
WILTEC is pleased to submit to you this report of a parking study we conducted for the Victory Outreach Church in Signal Hill, CA.

The purpose of this study was to determine if there is an adequate supply of parking spaces in the industrial/business park within which the church is located to meet the needs of all of its commercial tenants and those of the church at all times.

Based on the results of the analyses performed in this study, it was determined that the park does indeed have an adequate supply of parking spaces to meet the needs of all of its commercial tenants and the church.

It has been our pleasure to conduct this study and submit this report to you. Please do not hesitate to call me if you have any questions.

Sincerely,



Moses R. Wilson, PE
President

Parking Study for: **Victory Outreach Church**
3300 E. Willow Street
Signal Hill, CA 90755

Prepared for: Pastor Robert Chavez
Victory Outreach Church
T: 310-697-6384
E: vosp@sbcglobal.net

Prepared by: Moses R. Wilson, PE
License No: TR 1592

Date: February 7, 2024

Project Description

Victory Outreach is a worldwide organization that is committed to the noble task of evangelizing and discipling individuals with the message of hope and the divine plan of Jesus Christ. The church's central mission is to inspire individuals to unlock their potential in life and foster a sense of dignity, belonging, and purpose.

Victory Outreach Church in Signal Hill is part of the Victory Outreach organization and serves the community by offering a variety of programs and services aimed at empowering individuals to realize their possibilities in life.

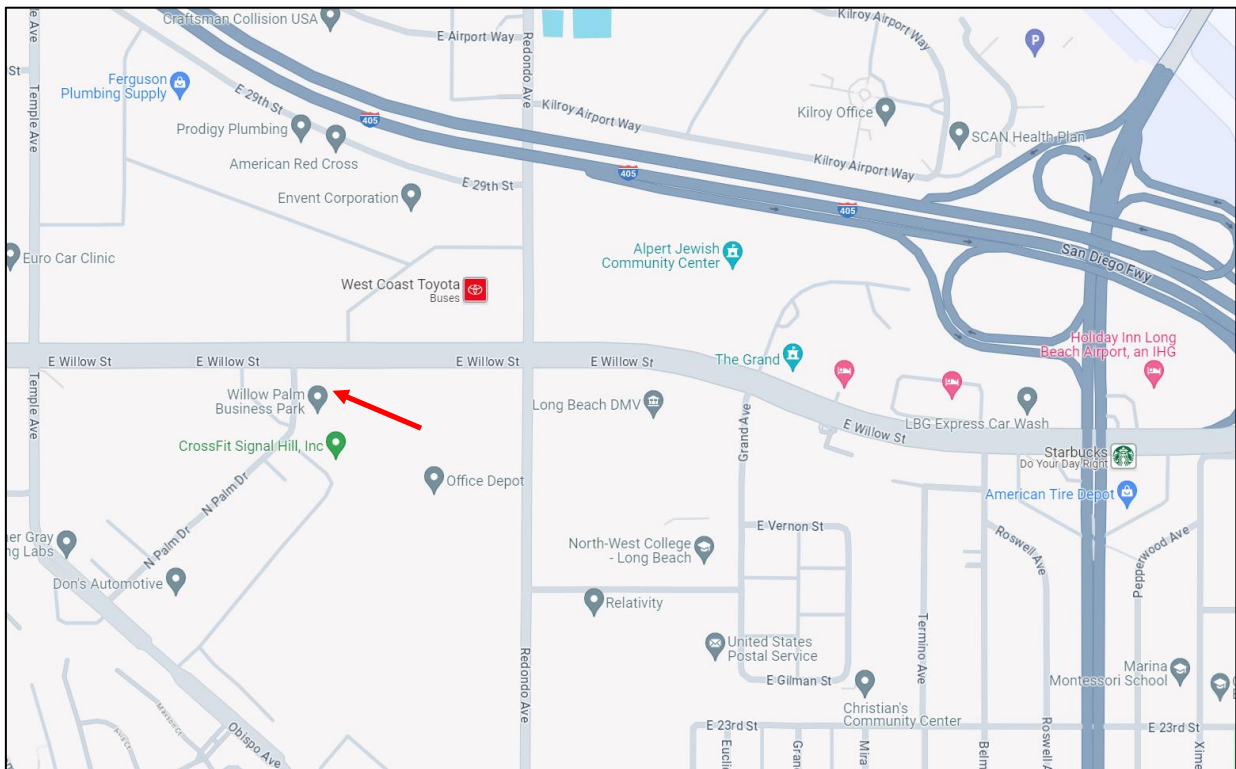
The church is located within an industrial/business park at 3300 E. Willow Street and shares the parking lot with 33 other commercial tenants.

Purpose Of This Study

The purpose of this study was to determine if the industrial/business park, within which the church is located, has an adequate supply of off-street parking spaces to meet the needs of all of its commercial tenants and those of the church at all times.

Site Location

The church is located within the Willow Palm Business Park at 3200-3300 E. Willow Street in the City of Signal Hill.



The park contains the following uses and has a total parking supply of 273 spaces.

TABLE 1 - SUMMARY USES IN THE BUSINESS PARK	
USE	SF GFA
Music, dance, crossfit gym and Tae Kwon Do Studios	7,800 sf gfa
General commercial uses	14,900 sf gfa
General industrial uses	15,594 sf gfa
Physical therapy office	6,500 sf gfa
Specialized retail uses	7,860 sf gfa
General office uses	9,600 sf gfa
Storage and Warehouse	11,460 sf gfa
Restaurant	2,965 sf gfa
Church	12,100 sf gfa

This summary was prepared using information provided by the park’s leasing/management company supplemented by a visual door-front inventory.

Church Operations

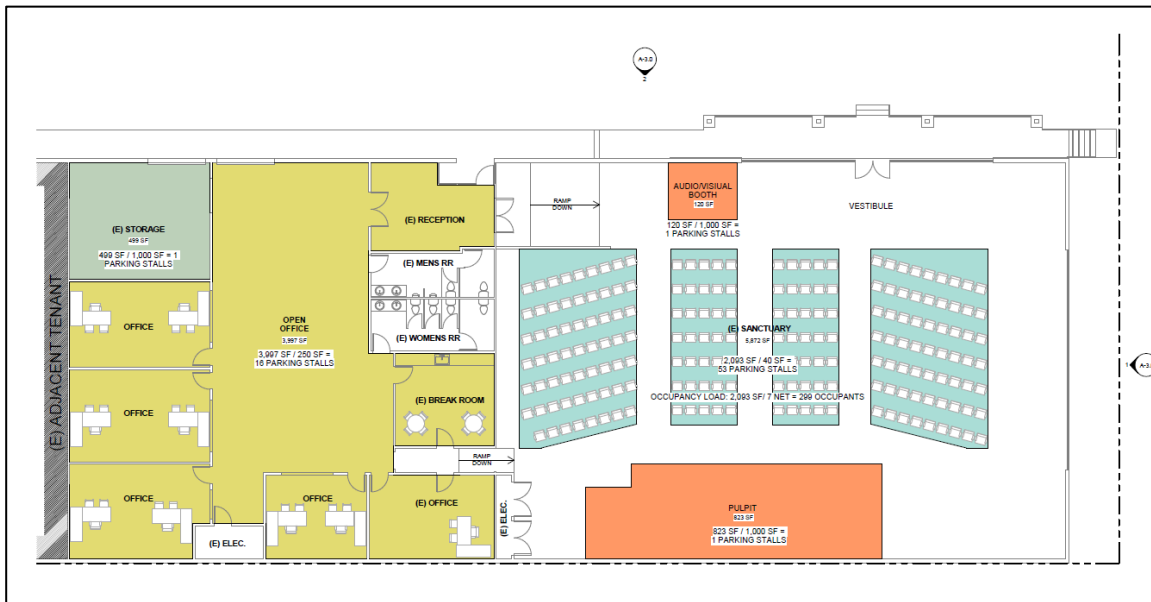
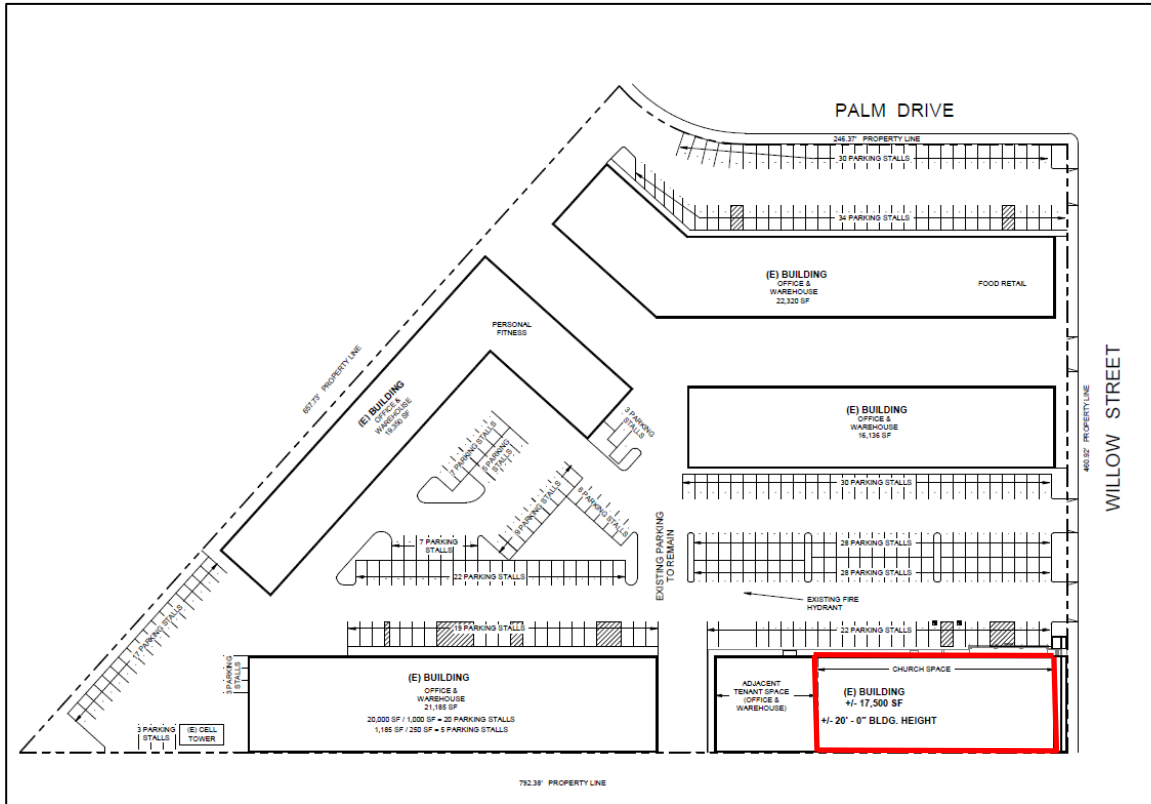
The church’s main functions are detailed below.

Sundays	Church Services - During Sunday services, the church also offers child care and other organized youth programs	10 AM to 12 NOON and 1 PM to 3 PM.
Mondays	Closed	All day
Tuesdays	Marital, family and substance abuse counseling	Evenings by appointment
Wednesdays	Young adults and student fellowship activities	Evenings
Thursdays	Band and choir practice / music lessons	Evenings
Fridays	Fire and Power prayer and fellowship	Evenings
Saturdays	Occasional special events	Once a month

The church has a full-time administrative staff of 2 people.

Church leaders stated that the average peak total attendance on a typical Sunday is about 140 people (total of pastors, assistants, congregation attendees, childcare teachers and children) for the first service and only about 40 for the second service.

Project Site Layout



Methodology of Analysis

Three different methodologies were used to assess the parking adequacy of the site.

1. Using factors from the City of Signal Hill’s Zoning Code.
2. Using factors from the Institute of Transportation Engineers Parking Generation Manual.
3. Using the results of actual parking surveys at the site.

Analysis using the City of Signal Hill’s Zoning Code

Per the City’s Zoning Code, “Combination of facilities shall provide the number of spaces required for each facility and the spaces provided for one facility shall not be construed as satisfying the requirement for another facility, except in the case of retail shopping centers.”

TABLE 2 - SPACES NEEDED PER CITY ZONING CODE			
USE	SF GFA	PARKING RATE	SPACES NEEDED
Music, dance, crossfit gym and Tae Kwon Do Studios	7,800 sf gfa	1 sp per 1,000 sf of open floor area + 5 sp per 1,000 sf office and seating area	39
General commercial uses	14,900 sf gfa	4 sp per 1,000 sf gfa	60
General industrial uses	15,594 sf gfa	1 sp per 1,000 sf gfa	16
Physical therapy office	6,500 sf gfa	5 sp per 1,000 sf gfa	33
Specialized retail uses	7,860 sf gfa	4 sp per 1,000 sf gfa	31
General office uses	9,600 sf gfa	4 sp per 1,000 sf gfa	38
Storage and Warehouse	11,460 sf gfa	1 sp per 1,000 sf gfa	11
Restaurant	2,965 sf gfa	10 sp per 1,000 sf gfa	30
Church (6,806 sf of assembly area)	12,100 sf gfa	1 sp per 40 sf of assembly area	170
	TOTAL	TOTAL	428

Based on this analysis, it was computed that the park was required to have 428 spaces.

Shared Parking

The Signal Hill Zoning Code does not factor for “shared parking” whereby different uses generate peak parking demands at different times and, in-so-doing, can share parking spaces. For example, the peak parking utilization patterns of an office building are very different from those of a movie theater. The peak parking demand of an office typically occurs around midday to early afternoon on a weekday while that of a theater occurs in the evening and on weekend days. As such, many of the same spaces occupied by office users during the day become vacant in the evenings and weekends and can be used by theater goers.

The same logic applies to the different uses in the Willow Palm Business Park. Essentially, the commercial uses in the park generate peak parking demands during the middle of the day on weekdays (Monday to Friday) and significantly less in the evenings and on weekends (Saturday and Sunday). Meanwhile, the church’s peak parking needs are on Sunday and, to a much lesser extent, on weekday evenings. As such, as the commercial uses in the park and the church do not have peak parking demand periods at the same times, or even on the same days, both uses can occupy the exact same spaces at different times without conflict.

Analysis using factors from the 6th Edition of the Institute of Transportation Engineers (ITE) Parking Generation Manual.

The differences in parking demand patterns have been studied for many years by professional traffic and transportation engineers and many of the results are published in the 6th edition of the ITE Parking Generation Manual (October 2023). This is a tool for transportation professionals, zoning boards and others to use in estimating the parking demands of various common land uses.

However, the ITE Parking Generation Manual does not describe uses exactly as shown in the Signal Hill Zoning Code. As such, engineering experience was applied to select the most appropriate rates to use for some uses.

Also of note is the fact that the ITE manual does not give a weekday parking generation factor for churches. As such, the factor shown below is based on engineering experience.

TABLE 3 - SPACES NEEDED PER ITE PARKING MANUAL			
USE	SF GFA	FACTORS USED	SPACES NEEDED
Music, dance, crossfit gym and Tae Kwon Do Studios	7,800 sf gfa	4.73 sp per 1,000 sf gfa	37
General commercial uses	14,900 sf gfa	1.76 sp per 1,000 sf gfa	26
General industrial uses	15,594 sf gfa	1.2 sp per 1,000 sf gfa	18
Physical therapy office	6,500 sf gfa	3.89 sp per 1,000 sf gfa	25
Specialized retail uses	7,860 sf gfa	0.54 sp per 1,000 sf gfa	4
General office uses	9,600 sf gfa	2.56 sp per 1,000 sf gfa	25
Storage and Warehouse	11,460 sf gfa	0.39 sp per 1,000 sf gfa	4
Restaurant	2,965 sf gfa	9.93 sp per 1,000 sf gfa	29
Church	12,100 sf gfa	0.2 sp per 1,000 sf gfa	2
		TOTAL	170

This analysis reflected the projected combined peak parking generation of all the uses in the park on a regular weekday.

As can be seen, it was estimated that the combined parking generation was only about 170 spaces. Allowing for the reasonable provision of empty parking spaces to minimize congestion in the driveways from drivers looking for a vacant parking space, it was estimated that the park would only need about 200 spaces.

Analysis Based on Field Surveys

Visual surveys of the number of vehicles parked at the Willow Palm Business Park were conducted on Sunday January 7th, Wednesday January 10th and Friday January 12th. The surveys conducted on Sunday reflected the regular peak parking demand of the church while those on Wednesday reflected the regular peak parking demand of the entire park. The surveys conducted on Friday reflected the peak period of parking demand for the church on a weekday.

Survey technicians were strategically located to independently monitor the parking utilization of the church's patrons and staff.

Time	Spaces Occupied By People Going To/From Church	Spaces Occupied By All Others	Total Spaces Occupied
9 AM	19	45	64
10 AM	42	43	85
11 AM	78	44	122
12 PM	56	46	102
1 PM	31	45	76
2 PM	37	42	79
3 PM	35	39	74
4 PM	4	33	37

TABLE 6 - Wednesday January 10th, 2024, Parking Survey Results

Time	Spaces Occupied By People Going To/From Church	Spaces Occupied By All Others	Total Spaces Occupied
7 AM	0	57	57
8 AM	0	86	86
9 AM	1	107	108
10 AM	2	107	109
11 AM	2	97	99
12 PM	2	90	92
1 PM	1	90	91
2 PM	2	89	91
3 PM	3	82	85
4 PM	3	85	88
5 PM	5	70	75
6 PM	7	86	93
7 PM	6	73	79
8 PM	6	65	71
9 PM	2	54	56

TABLE 7 - Friday January 12th, 2024, Parking Survey Results

Time	Spaces Occupied By People Going To/From Church	Spaces Occupied By All Others	Total Spaces Occupied
6 PM	9	84	93
7 PM	13	79	92
8 PM	13	73	86
9 PM	0	51	51

As can be seen, the maximum number of vehicles observed parked in the park was 122 on Sunday and 109 on Wednesday. This meant that there were at least 150 vacant spaces in the park at any given time on Sunday and 164 spaces on Wednesday.

This analysis recognizes that there was a roughly 10% tenant vacancy in the park at the time of the surveys. So, adjusting the results observed of the commercial tenants' peak parking utilization to account for this vacancy, the estimated overall total peak parking utilization was about 127 on Sunday and 120 on Wednesday leaving a vacancy rate of about 146 spaces on Sunday and 153 on Wednesday.

Conclusion

Based on the analyses presented above, it was determined that the Willow Palm Business Park at 3200-3300 E. Willow Street has an insufficient parking supply to meet the City of Signal Hill's Zoning Code.

However, upon further assessment of each of the park tenants' parking needs using factors published in the 6th Edition of the ITE (Institute of Transportation Engineers) Parking Generation Manual, and the results of visual parking surveys conducted at the site, it was determined that the existing supply of parking spaces at the park adequately met the needs of all the commercial tenants and the church at all times.