O'ROURKE ENGINEERING

PARKING ANALYSIS

PREPARED FOR

IDC

PREPARED BY

O'ROURKE ENGINEERING

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FEBRUARY 12, 1996

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February 9, 1996

Mr. Bill D. Vu
I.D.C.
2230 W. Chapman Avenue #200
Orange, Ca 92668

Dear Mr. Vu:

O'Rourke Engineering is pleased to present the findings of the shared parking analysis for the Tam's Beauty College located on Westminster in Garden Grove.

If you have any questions or comments, please do not hesitate to call.

Very truly yours,
O'ROURKE ENGINEERING

Susan E. O'Rourke,P.E.
President

INTRODUCTION

O'Rourke Engineering was retained to prepare a parking analysis for Tam's Beauty College located in an existing shopping center on Westminster Avenue in the City of Garden Grove. Tam's is proposing to add 1,818 square feet of office space and 1,846 square feet of restaurant to the existing beauty college. The purpose of the parking analysis is to determine if there is sufficient parking within the existing center to accommodate the additional demand for parking created by the additional square footage. The analysis relies on the concept of shared parking.

Shared parking refers to various land uses within the same site relying on the same parking spaces because they require the parking spaces during different time periods. Shared parking enables the land uses to provide less than the City code requires on an individual basis. The steps in the analysis include establishing the existing parking supply at the shopping center, establishing the existing demand, estimating the proposed supply and demand and conducting shared parking calculations for the actual field conditions and the code requirements. These steps and the ensuing results are presented herein.

EXISTING PARKING SUPPLY

The existing parking supply consists of 451 parking spaces throughout the shopping center. These 451 spaces are available to all customers of the center. Attachment A illustrates the existing parking layout. Note the layout has been divided into parking sections to allow evaluation by proximity to each use.

EXISTING PARKING DEMAND

Parking demand refers to the level of usage on site. To determine this demand, the parking spaces identified above were counted every 30 minutes to determine the number of spaces that were occupied, and similarly the number that were vacant. The spaces were counted on Thursday, February 1, 1996 from 12:00 to 3:00 pm and 8:00pm to 10:00pm, Tuesday February 6, 1996 from 8:00 to 10:00 am and again on Saturday for the same time periods. These counts represent the parking demand during the peak periods of a typical weekday and typical weekend day.

A summary of the count data is provided in Attachment B.

Based on the count data, the peak demand for parking was determined to begin at 8:30 pm on Saturday with a peak demand of 346 spaces. Given the need for 346 spaces, there will be a surplus (unoccupied, available parking spaces) of 105 spaces.

The peak periods, based on the ULI shared parking curves would be 3:00 pm on the weekday and 8:00 pm on the weekend. The peak demand is 433 on a typical weekday and 418 on a weekend. Since there are 451 spaces on site there will be more than enough parking for the proposed expansion.

CONCLUSION

The expansion of the Tam's Beauty College to provide office and restaurant space will require an additional 27 spaces based on the City's code. However, based on the guidelines for shared parking, the existing parking supply will more than accommodate the parking at the entire shopping center. There are approximately 86 spaces remaining after the expansion is accommodated under the existing conditions and approximately 18 spaces remaining after the expansion under a hypothetical code scenario.

Based on the existing demand and the code analysis, there is more than enough parking at the shopping center to accommodate the proposed expansion.

PROJECT DEMAND/SUPPLY

Based on the City's parking code, the proposed expansion requires 19 spaces for the restaurant use and 8 spaces for the office use. The code requires 1 space per 100 square feet of restaurant and 1 space per 250 square feet of office use. Using the shared parking techniques, the percentage of the city code required for peak periods of the day was evaluated. As noted above, the peak period was found to be 8:30 pm on Saturday. According to ULI standards, 100% of the restaurant parking will be required and 0% of the office parking will be required, Therefore the parking for the Tam's Beauty College Expansion is 19 spaces during the peak period of demand. Since there are 105 spaces available within the shopping center at this same period, the expansion of the Beauty College will be easily accommodated within the Center without impeding the parking of the other uses on the site.

CODE ANALYSIS

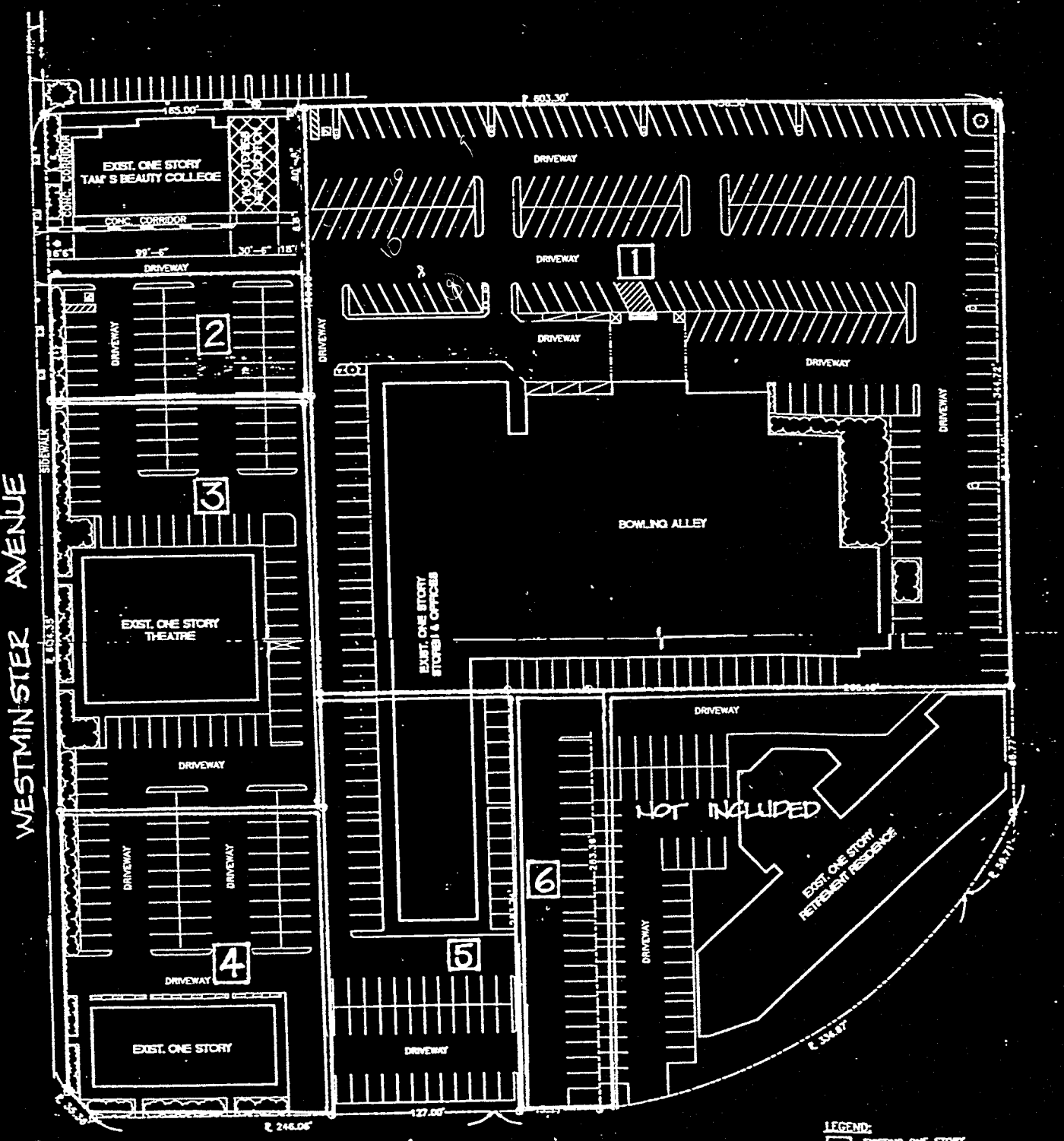
The City requested an additional analysis. The analysis they requested was to conduct a shared parking analysis assuming all the uses were functioning at a level that required 100% of the parking code during that use's peak. This analysis was conducted to ensure a greater level of comfort in the event the existing conditions under-represent the site's potential.

The number of spaces required for each of the existing uses was calculated using the City of Garden Grove's minimum parking space requirements. Some of the tenants were difficult to reach. Therefore, assumptions were made regarding the size of the facility. The existing uses include: the existing Beauty School, theater, restaurant, retail strip and a bowling alley. There are 40 bowling lanes at the bowling alley, approximately 5,800 square feet at the restaurant site and 5,672 square feet at the existing beauty school. The size of the retail strip was estimated at 17,000 square feet, using site plan measurements and field reviews. The number of seats in the theater was estimated at 1 per 25 square feet , equating to 409 seats. A seating capacity of 500 seats was used to ensure sufficient availability of parking.

Attachment C summarizes the code requirements for each existing use. As seen, the total spaces required is 526. However, the peak demand for each use does not coincide. Therefore, the need for all 526 spaces will not occur.

In order to determine if the proposed expansion could be accommodated with the existing uses, the requirements for the expansion were added to those for the existing uses. Attachment D shows the parking demand for the total shopping center including the expansion of Tam's Beauty College from 6:00 am to midnight for a weekday and the weekend based on ULI.

ATTACHMENT A- FIGURE PARKING LAYOUT



PLOT PLAN

NTS

1 PARKING SECTION

O'ROURKE ENGINEERING

ATTACHMENT B- EXISTING PARKING SUMMARY

Start Time	Section / Capacity / Occupied	1 232	2 29	3 65	4 43	5 56	6 26	Total 451
Weekday								
8:00 am		2	2	3	2	15	0	24
8:30 am		2	3	4	2	18	0	29
9:00 am		15	22	13	4	17	2	73
9:30 am		21	23	21	7	19	2	93
10:00 am		21	26	23	6	23	2	101
12:00 pm		56	20	37	6	25	0	144
12:30 pm		70	22	36	6	22	0	156
1:00 pm		88	22	35	7	27	0	179
1:30 pm		81	23	35	10	23	1	173
2:00 pm		83	22	34	5	18	2	164
2:30 pm		56	28	31	5	22	2	144
3:00 pm								
8:00 pm		122	11	34	25	28	1	221
8:30 pm		113	11	32	22	30	1	209
9:00 pm		122	14	28	15	25	1	205
9:30 pm		108	8	24	13	21	2	176
10:00 pm		103	4	18	9	20	2	156
Weekend								
8:00 am		8	0	1	5	10	1	25
8:30 am		7	3	3	6	10	1	30
9:00 am		22	22	12	9	15	1	81
9:30 am		28	24	19	11	15	1	98
10:00		47	26	22	11	21	2	129
12:00 pm		51	27	36	15	30	1	160
12:30 pm		39	25	33	9	24	1	131
1:00 pm		45	24	48	15	31	1	164
1:30 pm		58	23	52	19	28	1	181
2:00 pm		82	24	56	24	26	1	213
2:30 pm		78	27	56	19	21	1	202
3:00 pm		91	25	58	25	15	1	215
8:00 pm		144	28	64	42	49	13	340
8:30 pm		152	28	64	40	48	14	346
9:00 pm		147	25	53	35	48	9	317
9:30 pm		150	24	42	33	45	6	300
10:00 pm		125	22	43	35	40	5	270

ATTACHMENT C- CODE REQUIREMENTS BY USE

USE	AREA	RATE	SPACES
Beauty School	781 SF Office 4891 SF Instruc.	1/250 1/45	4 109
Resturaunt	1818 SF	1/100	19
Office (Proposed)	1846 SF	1/250	8
Theater	500 Seats	.3/Seat	150
Restaraunt	5800 SF	1/100	58
Retail Strip	17000 SF	1/200	85
Bowling Alley	40 Lanes	1/200	120
Total Existing			553
Total Existing + Proposed			526

ATTACHMENT D- CODE REQUIREMENTS DEMAND SUMMARY

	Office		Retail		Restaurant		Cinema	Total	Total
Hour	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday/Weekend	Weekday	Weekend
100% Code	121	121	85	85	77	77	270	553	
6:00 am	4	0	0	0	0	0	0	4	0
7:00 am	36	24	7	3	2	2	0	45	28
8:00 am	76	73	15	9	2	2	0	94	83
9:00 am	113	97	36	26	8	5	0	156	127
10:00 am	121	97	58	38	15	6	0	194	141
11:00 am	121	121	74	62	23	8	0	218	191
12:00 noon	73	121	82	71	39	23	81	275	296
1:00 pm	109	97	85	81	0	35	189	383	401
2:00 pm	109	73	82	85	46	35	189	427	381
3:00 pm	117	48	81	85	46	35	189	433	357
4:00 pm	93	48	74	77	46	35	189	402	349
5:00 pm	57	24	67	64	54	46	189	367	323
6:00 pm	28	24	70	55	69	69	216	383	365
7:00 pm	8	24	76	51	77	73	243	404	391
8:00 pm	8	24	74	47	77	77	270	429	418
9:00 pm	4	0	52	34	77	77	270	402	381
10:00 pm	0	0	27	32	69	73	270	367	375
11:00 pm	0	0	11	11	54	65	216	281	293
12:00 mid	73	0	0	0	39	58	189	300	247

O'ROURKE ENGINEERING

TRANSMITTAL

DATE: 5-2-96

TO: Sal Salazar
City of Garden Grove

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FROM: Susan O'Rourke

VIA: Mail

RE: Tam's Beauty College - Parking Analysis

CONTENTS: Final Report - copy (1)

COMMENTS:

O'ROURKE ENGINEERING

PARKING ANALYSIS

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PREPARED FOR

IDC

PREPARED BY

O'ROURKE ENGINEERING

MAY 1, 1996

O'ROURKE ENGINEERING

May 1, 1996

Mr. Bill D. Vu
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Orange, Ca 92668

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Dear Mr. Vu:

O'Rourke Engineering is pleased to present the findings of the shared parking analysis for the Tam's Beauty College located on Westminster in Garden Grove.

The revisions that were discussed have been made in the Code Analysis section of this report.

If you have any questions or comments, please do not hesitate to call.

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Shared parking is based on criteria published by the Urban Land Institute (ULI). Shared parking refers to various land uses within the same site being able to use the same parking spaces because the spaces are required during different time periods. Shared parking enables the land uses to provide less than the City code requires on an individual basis. The steps in the analysis include establishing the existing parking supply at the shopping center, establishing the existing demand, estimating the proposed supply and demand and conducting shared parking calculations for the actual field conditions and the code requirements. These steps and the ensuing results are presented herein.

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Based on the count data, the peak demand for parking was determined to begin at 8:30 pm on Saturday with a peak demand of 346 spaces. Given the need for 346 spaces, there will be a surplus (unoccupied, available parking spaces) of 105 spaces.

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Based on the City's parking code, the proposed expansion requires 19 spaces for the restaurant use and 8 spaces for the office use. The code requires 1 space per 100 square feet of restaurant and 1 space per 250 square feet of office use. Using the shared parking techniques, the percentage of the city code required for peak periods of the day was evaluated. As noted above, the peak period was found to be 8:30 pm on Saturday. According to ULI standards, 100% of the restaurant parking will be required and 0% of the office parking will be required, Therefore the parking for the Tam's Beauty College Expansion is 19 spaces during the peak period of demand. Since there are 105 spaces available within the shopping center at this same period, the expansion of the Beauty College will be easily accommodated within the Center without impeding the parking of the other uses on the site.

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The number of spaces required for each of the existing uses was calculated using the City of Garden Grove's minimum parking space requirements. The existing uses include: the existing Beauty School, theater, restaurant, retail strip and a bowling alley. There are 40 bowling lanes at the bowling alley, 368 seats at the theater, approximately 5,800 square feet at the restaurant site and 5,672 square feet at the existing beauty school. The size of the retail strip was estimated at 17,000 square feet, using site plan measurements and field reviews.

Attachment C summarizes the code requirements for each existing use. As seen, the total spaces required is 514. However, the peak demand for each use does not coincide. Therefore, the need for all 514 spaces will not occur.

In order to determine if the proposed expansion could be accommodated with the existing uses, the requirements for the expansion were added to those for the existing uses. Attachment D shows the parking demand for the total shopping center including the expansion of Tam's Beauty College from 6:00 am to midnight for a weekday and the weekend based on ULI.

The peak periods, based on the ULI shared parking curves would be 3:00 pm on the weekday and 8:00 pm on the weekend. The peak demand is 406 on a typical weekday and 379 on a weekend. Since there are 451 spaces on site there will be more than enough parking for the proposed expansion.

If additional expansion were desired within the shopping center, a demand for up to 45 spaces during the weekday peak could be accommodated. This demand could be generated by 100% of the following or some combination there of: 11,600 s.f. of office, 9,400 s.f. of retail, 7,500 s.f. of restaurant, 21 bowling lanes or 214 additional seats at the theater. These expansion possibilities were projected based on the worst case scenario even assuming the city codes and ULI peak periods.

CONCLUSION

The expansion of the Tam's Beauty College to provide office and restaurant space will require an additional 27 spaces based on the City's code. However, based on the guidelines for shared parking, the existing parking supply will more than accommodate the parking at the entire shopping center. There are approximately 86 spaces remaining after the expansion is accommodated under the existing conditions and approximately 45 spaces remaining after the expansion under a hypothetical code scenario.

Based on the existing demand and the code analysis, there is more than enough parking at the shopping center to accommodate the proposed expansion.

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