KOA CORPORATION
PLANNING & ENGINEERING

5095 Murphy Canyon Road, Suite 330
San Diego, CA 92123
t: 619.683.2933 f: 619.683.7982
www.koacorporation.com

TECHNICAL MEMORANDUM

To: Kathy Garcia, City of Del Mar
From: Arnold Torma, KOA Corporation
Re: Del Mar Village Specific Plan Parking Study
KOA No.: B14133
Date: February 27, 2012

BACKGROUND

This technical memorandum has been provided to supplement the Del Mar Village Specific Plan Traffic Impact Study (2012), and provides information about on-street and off-street parking occupancy in Del Mar, California.

To validate the utilization of parking in Del Mar, KOA conducted a parking survey. The results for typical weekday and weekend usage for both on-street and off-street parking can be found below.

METHODOLOGY

To consider both weekday and weekend peak hour parking occupancy, we conducted a parking survey on Thursday, January 26, 2012 and again on Saturday, January 28, 2012 between the hours of 11AM and 2 PM. During these counts, the weather was warmer than a normal winter day due to the weather being in the mid-70s, attracting the usual beach crowd. In order to accurately represent the typical existing parking situation in the City of Del Mar, the number of occupied parking spaces versus the number of total parking spaces for on and off street parking was counted every hour and then documented. Off-street parking tallies do not include single-family unit residential driveways and garages. However, apartment parking spaces are included.

The limits for the parking survey are approximately 900 feet to the north of 15th Street and Camino Del Mar, the Pacific Ocean coastline to the west, Luneta Drive/Highland Avenue to the east, and 8th Avenue to the south.

Figure 1 in Attachment A illustrates the designated parking study area. In order to capture both off-street and on-street parking, the parking study area is divided into blocks labeled from A to AH, with each block face assigned a number 1 through 4.

To find on-street and off-street parking utilization, the number of occupying cars was divided by the capacity of parking spaces. Therefore, when a parking area reaches and/or exceeds 90% utilization, it is effectively full and is defined as an impact.

EXISTING CONDITIONS

There are a total of 828 on-street parking spaces and 1,671 off-street parking spaces, resulting in a total of 2,499 parking spaces.

The Village Zone along Camino Del Mar (between the limits of 15th Street and 9th Street), has a total of 152 on-street parking spaces.

Weekday Results

According to the weekday count, the peak hour for the parking survey is at 12 PM. The on-street parking is 68% utilized (561 occupied spaces) and the off-street parking is 58% utilized (973 occupied spaces), with a total of 61% utilization (1,533 occupied spaces).

For the Village Zone along Camino Del Mar, on-street parking is 87% utilized (128 occupied spaces).

Weekend Results

According to the weekend count, the peak hour for the parking survey is at 1 PM. The on-street parking is 74% utilized (609 occupied spaces) and the off-street parking is 50% utilized (832 occupied spaces), with a total of 58% utilization (1,439 occupied spaces).

For the Village Zone along Camino Del Mar, on-street parking is 86% utilized (126 occupied spaces).

The figures in Attachment A display the parking blocks and parking faces which have 70%-89% and 90% or more utilization of weekday and weekend on-street and off-street parking. The existing parking study results are summarized in Attachment B.

PROPOSED PROJECT/FUTURE CONDITIONS

The proposed City of Del Mar Village Specific Plan introduces "new public streetscape improvements; new mixed-use zone development standards and design guidelines for private properties; and infrastructure to support future development." The planned redevelopment zone includes commercial facilities, residential dwelling units, restaurants, a civic facility and a boutique hotel totaling approximately 600,000 square feet. In order to estimate the future parking demand for the proposed land uses, we have applied a mix of parking generation rates. SANDAG's *Smart Growth Parking* rate of 3.5 spaces per thousand square feet was applied to the civic, commercial and retail land uses. For hotel and residential uses, a rate of 1.2 (provided by the City of Del Mar) and 2.0 (based on the ITE Parking Generation Manual), respectively, were applied. Finally, the City of Del Mar municipal code rate of 11.1 spaces per thousand square feet was applied to the restaurant land use. The total parking demand would be 2,290 spaces using the recommended commercial rate and the residential rate described above. Table 1, below summarizes the resulting parking demand.

Table 1
Parking Generation Rates

Land Use	Square Footage	DU	Rate	Demand
Hotel	23,000	60	1.25	75
Civic	35,000		3.30	116
Office	170,000		5.00	706
Retail	138,500		3.30	457
Restaurant	66,000		11.1	733
Residential	167,500	140	2	279
Total Demand				**2,366**

*assumed using an average size

The City has developed a strategy for accommodating an appropriate amount of parking assuming the shared use of some facilities and a strategy of "park once" for non-residential uses. Assuming that a parking facility is essentially full at 90% occupancy, and allowing for the walkability of the surrounding community, the City has been able to conclude that approximately 1,500 private spaces will be needed after making allowances for on-street use, a proposed structure at the City Hall property, and a series of management strategies being discussed with the City Council and with TPAC, the citizen's committee that focuses on parking.

PREVIOUS STUDIES & RECOMMENDATIONS

The City of Del Mar Community Plan describes nine provisions for the Village Center Specific Plan to improve the appearance and function of the Village Area. One of the provisions that pertain to parking is:

- Location of common satellite parking areas which will serve the downtown businesses;

As stated in SANDAG's *Parking Strategies for Smart Growth*, the following recommendations to help improve parking utilization within the City limits which are applicable are:

- Transit pass purchase programs
- Employer assistance with transit costs
- Neighborhood based car-sharing program
- Unbundling parking from tenant leases

In the Meyer, Mohaddas Associates' *Parking Master Plan Report* (May 2000), the following recommendations to help improve parking utilization within the City limits which are applicable are:

- Work with the Post Office to allow limited on-side customer parking
- Explore the use of Seagrove Lot and/or the Train Depot Lot for beach/employee parking
- Revise City codes to maximize future parking efficiency
- Create and circulate visitor parking information guide/map
- Pursue implementation of resident permit parking based on requests by affected residents (in conjunction with other measures to provide beach access)
- Pursue remote parking with peak season shuttle system
- Investigate potential locations for additional parking (100 to 150 more parking spaces) in the Village Center area where most feasible. Parking as close to the parking impacted are of 15th Street and Camino Del Mar would be most desirable, with more remote parking to the south also a potential solution if a feasible location in the north end of the village cannot be identified.
- Add parking via driveway consolidation and/or removal of unnecessary red curb area

SEASONALITY

Seasonality can be a factor for parking in this study area. In the previous study by Meyer, Mohaddas Associates, there is an average difference of parking occupancy of 47% to 74% between the months of January and July. Also, according to the estimates provided by the Del Mar lifeguards in January 2012, there are an estimated 10,000 beach goers in January over two days, and 30,000 beach goers in July over two days, with both estimates occurring over a weekend. Because our study area does not fully account for the same beach area as the Meyer, Mohaddas Associates report, caution should be used when determining parking utilization due to the change in seasons. The results reported herein have not been adjusted for seasonality.

CONCLUSION

In the Meyer, Mohaddas report, the overall on-street occupancy for the summer is 63% utilization, which compares to an overall occupancy on the weekend in this study for on-street parking of 73% utilization. For off-street parking, Meyer, Mohaddas Associates reports a peak utilization of 51%, while this survey reports 50%.

Our analysis concludes more on-street impacts occur to the west of Camino Del Mar, between 11th Street and 15th Street. For off-street parking, the largest impact occurs at Block P, also on the west side of Camino Del Mar. For the Village Zone, more impacts occur on the west side, with the largest impact occurring between 13th Street and 15th Street.

Given the proposed redevelopment program, there is a need for approximately 2,366 total parking spaces of which about 1,500 will be on private parcels.

AT/dc

Attachment A: Figures
Attachment B: Parking Survey Results

Attachment A
Figures

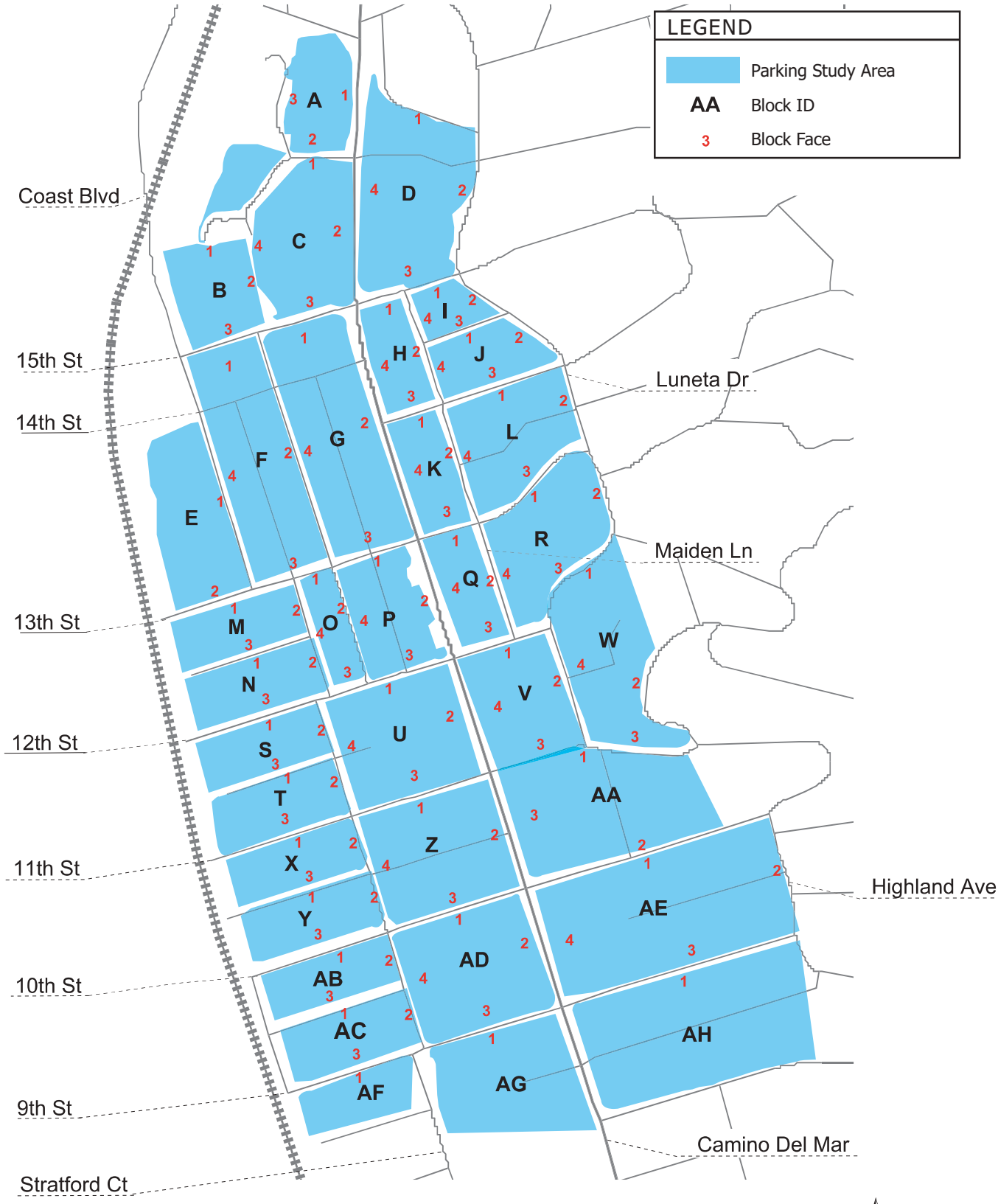

Figure 1
Parking Study Area

Figure 2
Weekday Peak Hour (12 PM)
On-Street Parking Occupancy

N
Not To Scale

Figure 3
Weekday Peak Hour (12 PM)
Off-Street Parking Occupancy

Figure 4
Weekend Peak Hour (1 PM)
On-Street Parking Occupancy

N
Not To Scale

Figure 5
Weekend Peak Hour (1 PM)
Off-Street Parking Occupancy

Figure 6
Weekday Peak Hour (12 PM)
On-Street Parking Occupancy for Village Zone

Figure 7
Weekend Peak Hour (1 PM)
On-Street Parking Occupancy for Village Zone

Attachment B
Parking Survey Results

Del Mar Parking Counts

Parking Inventory Form

***Date*= 1/26/2012 Thursday**
***Time*= 12:00 PM Peak**

Block	*OFF-STREET PARKING*									
	Public	Public Meter	Public Permit	Private	Private Meter	Private Permit	Private Valet	Total Demand	Total Capacity	% Occ
A				35		18	27	35	125	28%
B				36				36	75	48%
C		20	7				72	27	132	20%
D	332			6				338	399	**85%**
E				11				11	41	27%
F				10				10	14	**71%**
G				69				69	112	62%
H				36				36	70	51%
I				46				46	53	**87%**
J								0	0	0%
K	11			28				39	82	48%
L								0	0	0%
M								0	0	0%
N								0	0	0%
O								0	0	0%
P				33				33	34	**97%**
Q				43				43	84	51%
R								0	0	0%
S								0	0	0%
T								0	0	0%
U				38				38	51	**75%**
V				18				18	21	**86%**
W								0	0	0%
X								0	0	0%
Y								0	0	0%
Z	24							24	58	41%
AA				47				47	85	55%
AB								0	0	0%
AC								0	0	0%
AD				24				24	55	44%
AE				19				19	29	66%
AF								0	0	0%
AG				46				46	84	55%
AH				34				34	67	51%
TOTAL	367	20	7	579	0		99	973	1671	58%

Del Mar Parking Counts

Parking Inventory Form

***Date*= 1/26/2012 Thursday**
***Time*= 12:00 PM Peak**

Block	*ON-STREET PARKING*														
	Face 1 Demand	Face 1 Capacity	% Occ	Face 2 Demand	Face 2 Capacity	% Occ	Face 3 Demand	Face 3 Capacity	% Occ	Face 4 Demand	Face 4 Capacity	% Occ	Total Demand	Total Capacity	% Occ
A		0			0			0			0		0	0	0%
B		0			0		5	8	63%				5	8	63%
C		0			0		13	15	**87%**		0		13	15	**87%**
D	6	0			0			0			9	0%	6	9	67%
E	25	25	**100%**	4	10	40%							29	35	**83%**
F	11	13	**85%**	5	5	**100%**	5	6	**83%**		0		21	24	**88%**
G	10	12	**83%**	28	30	**93%**	8	8	**100%**	20	28	**71%**	66	78	**85%**
H		0			0		2	2	**100%**	8	9	**89%**	10	11	**91%**
I		0						0			0		0	0	0%
J		0			0		17	18	**94%**		0		17	18	**94%**
K	3	4	**75%**		0		4	9	44%	12	16	**75%**	19	29	66%
L	16	16	**100%**	6	7	**86%**	12	14	**86%**		0		34	37	**92%**
M	3	15	20%		0			0					3	15	20%
N		0			0		10	15	67%				10	15	67%
O	3	3	**100%**	12	13	**92%**	3	3	**100%**		0		18	19	**95%**
P	3	4	**75%**	12	16	**75%**	9	9	**100%**	12	12	**100%**	36	41	**88%**
Q	2	2	**100%**		0		4	4	**100%**	12	12	**100%**	18	18	**100%**
R	6	7	**86%**		3	0%		2	0%		0		6	12	50%
S	10	12	**83%**	5	5	**100%**		0					15	17	**88%**
T		0		2	2	**100%**	11	12	**92%**				13	14	**93%**
U	14	14	**100%**	24	31	**77%**	10	14	**71%**	3	12	25%	51	71	**72%**
V	7	8	**88%**				4	4	**100%**	21	23	**91%**	32	35	**91%**
W		0			6	0%	1	10	10%	8	12	67%	9	28	32%
X	11	11	**100%**	4	6	67%		0					15	17	**88%**
Y		0		5	5	**100%**	7	16	44%				12	21	57%
Z	8	12	67%		0		3	10	30%	5	11	45%	16	33	48%
AA	8	26	31%	5	23	22%	7	9	**78%**				20	58	34%
AB	5	14	36%	1	4	25%		0					6	18	33%
AC		0			2	0%	7	10	**70%**				7	12	58%
AD	1	12	8%		0		6	11	55%	4	7	57%	11	30	37%
AE	5	10	50%	4	6	67%	5	24	21%		0		14	40	35%
AF	6	14	43%										6	14	43%
AG	11	12	**92%**										11	12	**92%**
AH	12	24	50%										12	24	50%
TOTAL	186	270		117	174		153	233		105	151		561	828	68%

Del Mar Parking Counts

Parking Inventory Form

***Date*= 1/26/2012 Thursday**
***Time*= 12:00 PM Peak**

Block	*ON-STREET CAMINO DEL MAR*											
	Face 2 Demand	Face 2 Capacity	% Occ	Face 3 Demand	Face 3 Capacity	% Occ	Face 4 Demand	Face 4 Capacity	% Occ	Total Demand	Total Capacity	% Occ
G	28	30	**93%**							28	30	**93%**
H							8	9	**89%**	8	9	**89%**
K							12	16	**75%**	12	16	**75%**
P	12	16	**75%**							12	16	**75%**
Q							12	12	**100%**	12	12	**100%**
U	24	31	**77%**							24	31	**77%**
V							21	23	**91%**	21	23	**91%**
Z		0								0	0	0%
AA				7	9	78%				7	9	**78%**
AD		0								0	0	0%
AE	4	6	67%							4	6	67%
AG		0								0	0	0%
AH		0								0	0	0%
TOTAL	68	83		7	9		53	60		128	152	84%

Del Mar Parking Counts

Parking Inventory Form

Date= **1/28/2012 Saturday**
Time: **1:00 PM Peak**

Block	*OFF-STREET PARKING*									
	Public	Public Meter	Public Permit	Private	Private Meter	Private Permit	Private Valet	Total Demand	Total Capacity	% Occ
A				17		18	29	17	125	14%
B				36				36	75	48%
C		9	41	54			24	104	132	**79%**
D	332			8				340	399	**85%**
E				1				1	41	2%
F				7				7	14	50%
G				53				53	112	47%
H				17				17	70	24%
I				14				14	53	26%
J								0	0	0%
K	12			19				31	82	38%
L								0	0	0%
M								0	0	0%
N								0	0	0%
O								0	0	0%
P				23				23	34	68%
Q				13				13	84	15%
R								0	0	0%
S								0	0	0%
T								0	0	0%
U				14				14	51	27%
V				13				13	21	62%
W								0	0	0%
X								0	0	0%
Y								0	0	0%
Z	26							26	58	45%
AA				31				31	85	36%
AB								0	0	0%
AC								0	0	0%
AD				28				28	55	51%
AE								0	29	0%
AF								0	0	0%
AG				4				4	84	5%
AH				8				8	67	12%
TOTAL	370	9	41	359	0		53	832	1671	50%

Del Mar Parking Counts

Parking Inventory Form

Date= **1/28/2012 Saturday**
Time: **1:00 PM Peak**

Block	*ON-STREET PARKING*														
	Face 1 Demand	Face 1 Capacity	% Occ	Face 2 Demand	Face 2 Capacity	% Occ	Face 3 Demand	Face 3 Capacity	% Occ	Face 4 Demand	Face 4 Capacity	% Occ	**Total Demand**	**Total Capacity**	**% Occ**
A		0			0			0			0		0	0	0%
B		0			0		3	8	38%				3	8	38%
C		0			0		13	15	**87%**		0		13	15	**87%**
D	2	0			0			0		7	9	**78%**	9	9	**100%**
E	25	25	**100%**	8	10	**80%**							33	35	**94%**
F	12	13	**92%**	5	5	**100%**	5	6	**83%**		0		22	24	**92%**
G	12	12	**100%**	30	30	**100%**	8	8	**100%**	26	28	**93%**	76	78	**97%**
H		0			0		2	2	**100%**	6	9	67%	8	11	**73%**
I		0			0			0			0		0	0	0%
J		0			0		18	18	**100%**		0		18	18	**100%**
K	2	4	50%		0		7	9	**78%**	12	16	**75%**	21	29	**72%**
L	10	16	63%	5	7	**71%**	9	14	64%		0		24	37	65%
M	14	15	**93%**		0			0					14	15	**93%**
N		0			0		11	15	**73%**				11	15	**73%**
O	2	3	67%	13	13	**100%**	2	3	67%		0		17	19	89%
P	3	4	**75%**	15	16	**94%**	9	9	**100%**	12	12	**100%**	39	41	**95%**
Q	2	2	**100%**		0		4	4	**100%**	12	12	**100%**	18	18	**100%**
R	2	7	29%	2	3	67%	2	2	**100%**		0		6	12	50%
S	12	12	**100%**	5	5	**100%**		0					17	17	**100%**
T		0		2	2	**100%**	12	12	**100%**				14	14	**100%**
U	13	14	**93%**	28	31	**90%**	13	14	**93%**	12	12	**100%**	66	71	**93%**
V	8	8	**100%**				4	4	**100%**	19	23	**83%**	31	35	**89%**
W	6	0			6	0%	1	10	10%		12	0%	7	28	25%
X	11	11	**100%**	4	6	67%		0					15	17	**88%**
Y		0		5	5	**100%**	12	16	**75%**				17	21	**81%**
Z	12	12	**100%**		0		8	10	**80%**	7	11	64%	27	33	**82%**
AA	5	26	19%	7	23	30%	4	9	44%				16	58	28%
AB	4	14	29%	3	4	**75%**		0					7	18	39%
AC		0		1	2	50%	3	10	30%				4	12	33%
AD	8	12	67%		0		7	11	64%	7	7	**100%**	22	30	**73%**
AE	3	10	30%	6	6	**100%**	9	24	38%		0		18	40	45%
AF	4	14	29%										4	14	29%
AG		12	0%										0	12	0%
AH	12	24	50%										12	24	50%
TOTAL	184	270		139	174		166	233		120	151		609	828	**74%**

Del Mar Parking Counts

Parking Inventory Form

Date= **1/28/2012 Saturday**
Time: **1:00 PM Peak**

Block	*ON-STREET CAMINO DEL MAR*											
	Face 2 Demand	Face 2 Capacity	% Occ	Face 3 Demand	Face 3 Capacity	% Occ	Face 4 Demand	Face 4 Capacity	% Occ	**Total Demand**	**Total Capacity**	**% Occ**
G	30	30	**100%**							30	30	**100%**
H							6	9	67%	6	9	67%
K							12	16	**75%**	12	16	**75%**
P	15	16	**94%**							15	16	**94%**
Q							12	12	**100%**	12	12	**100%**
U	28	31	**90%**							28	31	**90%**
V							19	23	**83%**	19	23	**83%**
Z		0								0	0	0%
AA				4	9	44%				4	9	44%
AD		0								0	0	0%
AE								0		0	0	0%
AG		0								0	0	0%
AH		0								0	0	0%
TOTAL	73	77		4	9		49	60		126	146	**86%**