

Parks Recreation & Waterfront

Waterfront Specific Plan for the City of Berkeley Public Tidelands Area

Supporting Infrastructure, Revenue, Parking, and Sea Level Rise Studies (as of March 2023)

The following studies were produced as part of *Waterfront Specific Plan* (formerly "Berkeley Marina Area Specific Plan") process, with the exception of the "Berkeley Marina Sea Level Rise AB 691 Assessment Study". These studies are not final and continue to be updated by City staff, Hargreaves Jones, and the consultants associated with each study.

The *Waterfront Specific Plan* process began in the spring of 2020, just as the global pandemic emerged, which extended the anticipated duration of the effort and has required several updates and revisions to data and analysis included in these documents. These studies have informed the development of the *Waterfront Specific Plan* to date, and will continue to be referenced and revised as this process continues.

Final versions will be released in coordination with the final *Waterfront Specific Plan* – following an upcoming environmental review process, further community and stakeholder engagement, and ongoing City Council review.

- Infrastructure Assessment DRAFT (May 2021) Hargreaves Jones, Moffatt & Nichol, Nelson\Nygaard, Bkf Engineering
- 2. <u>Existing Amenities and Operations Assessment DRAFT</u> (March 2021) Keyser Marston Associates
- 3. <u>Implementation Strategy DRAFT</u> (April 2021) Keyser Marston Associates
- 4. <u>Hotel Food and Beverage Revenue Potential DRAFT</u> (September 2022) Keyser Marston Associates
- Dredging Needs Technical Memo DRAFT (April 2021) Moffatt & Nichol
- 6. <u>Slip Mix Study DRAFT</u> (August 2022) Moffatt & Nichol
- 7. <u>Parking & Mobility Framework DRAFT</u> (January 2022) Nelson Nygaard
- 8. <u>Berkeley Marina Sea Level Rise AB 691 Assessment Study DRAFT</u> (August 2019) NCE



2185 N California Blvd., Suite 500 Walnut Creek, CA 94595

(925) 944-5411 www.moffattnichol.com

MEMORANDUM

То:	Meghen Quinn, Hargreaves Assoc.
From:	Brad Porter, PE
Date:	August 5, 2022
Subject:	Berkeley Marina Area Specific Plan – Slip Mix Study
M&N Job No.:	201846

This memorandum summarizes a study investigating potential revenue increases at Berkeley Marina by replacing some of the existing 20-30 ft berths with 30-40 ft berths.

Findings and Recommendations

1. An appropriate near-term opportunity for BMASP to increase revenue is to increase slip fees based on competitive (fees charged at similar marinas in the area) or proportion (to the slip area), with assumed current average occupancy rates. This will increase revenue with no capital cost.

2. As docks need to be replaced when they reach the end of their useful life, they should be replaced with docks that are 30-40 in length.

3. Docks J, L and M are the most likely docks that would be replaced in the mid-term. Two alternatives for replacement of these docks have been analyzed for their potential to increase revenue and are presented.

Discussion

Total revenue is primarily determined by three factors:

- 1. Total berthing length (ft)
- 2. Rate charged per foot of berth (\$/ft)
- 3. Occupancy rate (% of berths being rented)
- 1. Total Berthing Length

The total length of berthing to be rented is the sum of the lengths of all rentable boat berths in the marina basin. For example, a marina with (10) 40 ft long and (30) 30 ft long berths (or "slips") has 400 + 900 = 1,300 ft of berthing. The number of berths and the total length of berthing decreases as the length of berths increases. This is because berth widths increase as their length increases and fairways (the water channels between docks) get wider as berth lengths increase to accommodate the larger boats. Table 1 shows this relationship: a 25 ft long berth requires 735.7 sq ft while a 50 ft long berth, although twice the length, requires 2,341 sq ft, more than 3x the area of the 25 ft long berth. The column highlighted in yellow gives this ratio of the added area per foot of length compared to a 25 ft long berth.

Length-L (ft)	Finger Width-W (ft)	Area-A (sf) (4)	Ratio A/L	A/L Ratio Compared to 25 Ft	Rate Proporti to Are \$/LF	onal :a	Berkeley Rates (1)	Normalize to 25 Ft (6)	Berkeley Rates (2)	Avg Central Bay Rates (3)	Normalize to 25 Ft (6)
25	3	735.7	29.4	1.00	\$	9.77	9.76	1.00	10.74	10.50	1.00
26	3	779.6	30.0	1.02	\$	9.95	9.76	1.00	10.74	10.50	
28	3	869.0	31.0	1.05	\$ 1	0.30	9.76	1.00	10.74	10.50	
30	3	960.4	32.0	1.09	\$ 1	0.63	10.34	1.06	11.37	10.88	1.11
35	3	1197.0	34.2	1.16	\$ 1	1.35	10.34	1.06	11.37	11.19	1.15
40	4	1521.9	38.0	1.29	\$ 1	2.63	10.95	1.12	12.05	11.50	1.18
45	4	1787.1	39.7	1.35	\$ 1	3.18	10.95	1.12	12.05	12.78	1.31
50	4	2060.4	41.2	1.40	\$ 1	3.68	11.61	1.19	12.77	12.90	1.32
55	4	2341.0	42.6	1.45	\$ 1·	4.13	11.61	1.19	12.77	12.20	1.25
Notes:	1. Rate for	a double b	erth (1 finger), downwind							
	2. Rate for	a double b	erth (1 finger), upwind							
	3. Based u	pon San Fr	ancisco Bay I	Area 2019 Ma	rina Rate	Surve	ey using rate	es for compara	able marina	s in central	
	SF Bay: So	uth Beach I	Harbor, Eme	1y Cove, Eme	ryville, M	arina	Bay, Bricky	yard Cove. Ra	tes are for	double	
	berth (1 fir	nger), unkno	own if any su	charges may l	oe charge	d in a	ddition (e.g	, for upwind h	oerth)		
	4. Area includes total water area for boat slip, finger and $1/2$ the adjacent fairway width										
	5. Rate is t	heoretical r	ate to be cha	rged based up	on the ad	dition	nal A/L Ra	tio compared	to a 25 ft sl	ip	
	6. Ratio of	the charge	per ft compa	red to a 25 ft	slip.						

Table 1 – Berth Area/Length and Rate Comparison

Due to the increased area needed per additional foot of berth length, there will be less total length of berthing if larger berths are constructed. A basin that contains (100) 25 ft berths for a total of 2,500 ft of berthing might accommodate (50) 40 ft berths for a total of 2,000 ft of berthing.

To compensate for the decrease in total berthing length as berths get larger, the rate charged per ft of berth length needs to increase to accommodate for this loss. The column "rate proportional to area" highlights these increases. Most marinas do increase their rate per foot as berth length increases, as shown in the green columns for Berkeley and other comparable marinas, but the increase is generally less than the full proportional amount based upon berth area.

The total number and the distribution of slip lengths for all marinas in the San Francisco Bay compared to Berkeley Marina is shown in Table 2 below. Berkeley has a larger proportion of smaller slips, 30 ft and less, of 62.1% compared to 42.1% for the area totals. This is also the size of slip that has the lowest occupancy rate at Berkeley Marina, as discussed is section 3.

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	SF Are	a Total	Berkeley		
Slip Length	# of Slips	%	# of Slips	%	
25'	1931	11.7%	290	28.7%	
30'	5002	30.4%	338	33.4%	
35'	3033	18.4%	141	13.9%	
40'	2559	15.5%	86	8.5%	
45'	1372	8.3%	51	5.0%	
50'	1070	6.5%	72	7.1%	
55'	219	1.3%		0.0%	
60'	332	2.0%	23	2.3%	
65'	66	0.4%	7	0.7%	
70'	32	0.2%	1	0.1%	
80'	40	0.2%	3	0.3%	
Side Ties	566	3.4%		0.0%	
End Ties	236	1.4%			
Total # of slips	16458	100.00%	1012	100%	

Table 2 – Total of all San Francisco Bay Area Marina Slips Compared to Berkeley

2. Rate Charged per Foot of Berth

Market trends and location within the bay are the primary factors that determine the rate that is charged per foot for marina berths. Marinas that have newer facilities, amenities, and are closer to the central San Francisco Bay can charge higher rates than those that are older and further away. Every few years a survey is conducted of the rates and availability (% of berths occupied) of berths in the greater San Francisco Bay area. The marinas most comparable to Berkeley Marina within the central San Francisco Bay are:

- Emeryville Marina •
- Marina Bay Yacht Harbor
- Emery Cove Yacht Harbor •
- Brickyard Cove Marina
- South Beach Harbor

A comparison for rates charged at these marinas for 30 ft and 40 ft berths are shown in Table 3.



Marina - 30'	Sing	e Finger	Marina - 30'	Doubl	e Finger
San Francisco Marina Small Craft Harbor WEST	\$	14.04	Clipper Yacht Harbor	\$	15.70
Richardson Bay Marina	\$	13.50	Blue Water Yacht Harbor	\$	15.17
Pelican Harbour	\$	13.25	Marina Plaza Harbor	\$	13.75
Sausalito Shipyard and Marina	\$	13.00	Sausalito Shipyard and Marir	\$	13.00
Santa Cruz Harbor - South	\$	12.79	Bair Island Marina	\$	12.75
Santa Cruz Harbor - North	\$	12.10	South Beach Harbor	\$	12.29
Emeryville Marina	\$	11.50	Emeryville Marina	\$	12.17
Marina Village Yacht Harbor	\$	11.06	Emery Cove Yacht Harbor	\$	11.90
City of Berkeley Marina	\$	10.34	City of Berkeley Marina	\$	11.37
Brickyard Cove Marina	\$	10.25	Marina Village Yacht Harbor	\$	11.06
San Francisco Marina Small Craft Harbor - EAST	\$	10.01	Benicia Marina	\$	10.95
Average	\$	9.79	Brickyard Cove Marina	\$	10.85
Glen Cove Marina	\$	9.50	Oakland Marinas	\$	10.40
Fortman Marina	\$	8.43	Oakland Yacht Club	\$	10.25
Brisbane Marina	\$	8.01	Pillar Point Harbor	\$	10.04
Point San Pablo	\$	8.00	Loch Lomand Marina	\$	10.00
Oyster Point Marina	\$	7.93	Average	\$	9.89
Vallejo Municipal Marina	\$	7.43	Marina Bay Yacht Harbor	\$	9.86
Napa Valley Marina	\$	7.20	Grand Marina	\$	9.36
Embarcadero Cove	\$	6.00	Median	\$	9.24
Antioch Marina	\$	5.75	Vallejo Municipal Marina	\$	9.12
Martinez Marina - Almar Marinas	\$	5.70	San Rafael Yacht Harbor	\$	9.00
			Channel Marina	\$	8.90
Central Bay Average	\$	10.88	Brisbane Marina	\$	8.80

Table 3 – Bay Area Marina Rate Survey 2019: 30 and 40 ft Berths

Marina - 40'		gle Finger	Marina - 40'	Double Finger	
San Francisco Marina Small Craft Harbor WEST	\$	17.04	Schoonmaker Point Marina	\$	18.50
Marina Village Yacht Harbor	\$	13.93	Clipper Yacht Harbor	\$	18.11
Richardson Bay Marina	\$	13.50	Blue Water Yacht Harbor	\$	17.25
Santa Cruz Harbor - South	\$	12.79	South Beach Harbor	\$	15.99
Emeryville Marina	\$	12.50	Pelican Harbour	\$	15.50
Santa Cruz Harbor - North	\$	12.44	Santa Cruz Harbor - South	\$	14.09
Sausalito Shipyard and Marina	\$	11.88	Marina Village Yacht Harbor	\$	13.93
City of Berkeley Marina	\$	10.95	Emeryville Marina	\$	13.25
Brickyard Cove Marina	\$	10.50	Bair Island Marina	\$	13.00
Average	\$	10.13	Loch Lomand Marina	\$	13.00
Fortman Marina	\$	9.85	Oakland Marinas	\$	12.68
Median	\$	9.76	Pier 39 Marina	\$	12.40
Oakland Marinas	\$	9.67	Emery Cove Yacht Harbor	\$	12.25
Glen Cove Marina	\$	9.50	City of Berkeley Marina	\$	12.04
Oyster Point Marina	\$	8.25	Sausalito Shipyard and Marina	\$	11.88
Brisbane Marina	\$	8.01	Grand Marina	\$	11.78
Point San Pablo	\$	8.00	Brickyard Cove Marina	\$	11.25
Vallejo Municipal Marina	\$	7.43	Average	\$	11.20
Napa Valley Marina	\$	7.20	Oakland Yacht Club	\$	11.13
Martinez Marina - Almar Marinas	\$	6.65	Benicia Marina	\$	10.95
Embarcadero Cove	\$	6.50	Marina Bay Yacht Harbor	\$	10.91
Suisun Marina	\$	6.10	Alameda Marina	\$	10.00
			Westpoint Harbor	\$	10.00
Central Bay Average	\$	11.50	Treasure Island Marina	\$	9.90
			Fortman Marina	\$	9.85



3. Occupancy Rate

The occupancy rate (percentage of slips occupied by paying tenants) is determined by the following:

- 1. Time of Year
- 2. Economic Conditions
- 3. Condition of Docks
- 4. Length of the Vessel
- 5. Wind Exposure and Direction
- 6. Security
- 7. Amenities at the Marina

Discussion of many of these factors is contained in the "Berkeley Marina Area Specific Plan, Marina Enterprise Fund Status and Analysis of Potential Revenue-Generating Options" (Keyser Marston Assoc., June 2022).

Boating is more popular in the spring through mid-fall months, and less popular in the winter. Accordingly, vessels under 25 ft in length, which can be easily taken out of the water on a trailer, are often moved out of their berth in the winter to reduce berthing costs for their owners. For the months that the boat is withdrawn, the berth does not generate revenue. Marinas with a higher proportion of smaller length slips tend to feel the financial impacts of winter withdrawals more than marinas with a higher proportion of larger slips, which contain boats that are less likely to be withdrawn. Table 4 presents the occupancy rate for 4 years by berth length and shows the lower occupancy rate for smaller vessels 20-29 ft long.

Average Occupancy Rate by	Year					
Berth size (ft)	2018	2019	2020	2021		
<20	91%	90%	89%	94%		
>70	100%	97%	88%	93%		
20-29	74%	72%	72%	76%		
30-39	83%	82%	84%	83%		
40-49	77%	83%	82%	86%		
50-59	89%	91%	89%	71%		
60-69	76%	81%	82%	81%		

Table 4 – Berkeley Marina Occupancy Rates by Year and Vessel Size

Table 5 presents the occupancy rate by dock and large variations can be seen in the occupancy rates. This is largely attributed to wind exposure, dock condition, and berth length. Docks in worse condition have lower occupancy rates, which is highlighted in the lower rates for Docks D/E which are scheduled for replacement in the coming years. Docks with higher wind exposure offer less protection for their vessels and as a result have lower occupancy rates.

Average Occupancy Rate by		Year	
Dock	2018	2019	2020
B/C	64%	63%	62%
D/E	47%	46%	54%
F/G	90%	90%	84%
H/I	93%	95%	93%
J	67%	66%	61%
К	61%	75%	71%
L/M	88%	89%	85%



Potential Dock Reconfiguration

Two alternatives of potential slip length reconfigurations were developed for J, L, and M docks (Figure 1, Figure 2). These docks are older docks that would likely be the next docks to be replaced after D/E docks that are currently in process of being replaced. The alternatives sought to replace the existing slips that range from predominately 22-30 ft in length, with slips that are 30 ft or longer. This will reduce the proportion of slips that have the highest vacancy rate and bring the slip distribution more in-line with area averages as discussed in section 1.

Alternative 1

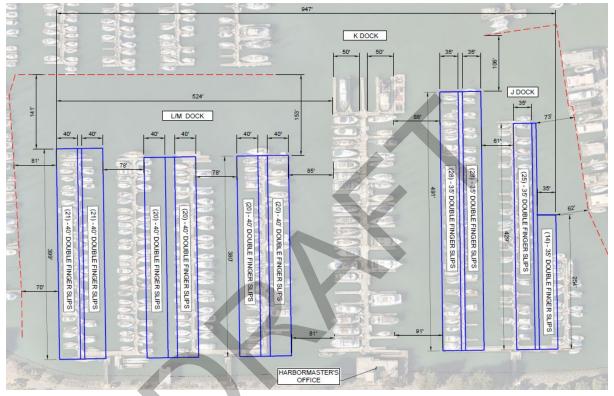


Figure 1 – Docks J, L, and M Reconfiguration Alternative 1

Table 6 Slip Distribution	of Dooke I	I M Deconfiguration Alternative 1
I A D E O - SI D D S U D U U U U U U U U U U U U U U U	JI DUCKS J.	, L, M Reconfiguration Alternative 1
		, _,

	J Dock						L and M Docks			
	Current	Layout	ALT 1	ALT 1			Current	Layout	ALT 1	
Slip Length	No. Slips	Slip LF	No. Slips	Slip LF	L	Slip ength (ft)	No. Slips	Slip LF	No. Slips	Slip LF
(ft)			•			22	2	44		0
22		0		0	_	24	1	24		0
24	34	816		0		25		0		0
				-		26	78	2028		0
25	64	1600		0		28	49	1372		0
26		0		0		30	22	660		0
28	52	1456		0		35	22	770		0
35		0	95	3325		40		0	122	4880
		-				45	19	855		0
TOTAL	150	3872	95	3325	٦	TOTAL	193	5753	122	4880



Alternative 2

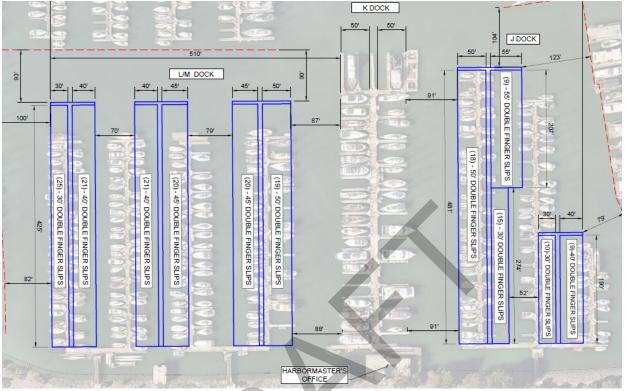


Figure 2 – Docks J, L, and M Reconfiguration Alternative 2

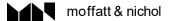
Table 7 – Slip Distribution of Dock	J. L. and M Reconfiguration Alterna	ative 2
	o, E, and Mirkeoornigaration / aterne	

		-						
	Current	Layout	ALT 2				Current Lay	
Slip Length (ft)	No. Slips	Slip LF	No. Slips	Slip LF		Slip Length (ft)	No. Slips	9
22		0		0		22	2	
24	34	816		0		24	1	
25	64	1600		0		25		
26		0		0		26	78	
28	52	1456		0		28	49	
30		0	25	750		30	22	
35		0		0		35	22	
40		0	9	360		40		
45		0		0		45	19	
50		0	18	900		50		
55		0	9	495		55		
TOTAL	150	3872	61	2505		TOTAL	193	

		L and M	1 Docks	
	Current	Layout	ALT 2	
Slip Length (ft)	No. Slips	Slip LF	No. Slips	Slip LF
22	2	44		0
24	1	24		0
25		0	25	625
26	78	2028		0
28	49	1372		0
30	22	660		0
35	22	770		0
40		0	42	1680
45	19	855	40	1800
50		0	19	950
55		0		0
TOTAL	193	5753	126	5055

Discussion

In both alternatives, the resulting total number and total lineal feet of slips is less than the existing layout. This is a result of the increase in the length per slip, which subsequently has an impact on area used per slip and fairway widths, as discussed in the first section.



An analysis of the potential revenue that might be generated by these two alternatives was performed. The analysis considers the variation in occupancy and the rate that might be charged for the slips. A summary of this analysis is shown in Table 8 and the complete analysis sheets are in Appendix A.

Table 8 – Potentia	l Revenue from	Berth	Reconfigurations	at Docks J, L, M
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		Í			Appendix
	Annual In	come		Gain (5)	(6)
Current Docks				uun (5)	(-7
Existing Rates (2)					
Occupancy 70-90% (1)	\$ 871	L,206			
Occupancy 100%	-		\$	266,673	A1
Competitive Rates (2)					
Occupancy 70-90%	\$ 970),363	\$	99,157	A2
Occupancy 100%	\$ 1,26	7,671	\$	396,465	A2
Proportional Rates (2, 4)					
Occupancy 70-90%	Ś 922	2,823	Ś	51,617	A3
Occupancy 100%			\$	331,563	A3
Alternative 1-Competive	Rates				
Occupancy 70-90%	\$ 912,24	4.20	\$	41,038.20	A4
Occupancy 100%	\$ 1,119,92	21.00	\$	248,715.00	A4
Loan Payment (3)				(\$621,594.71)	
Alternative 1-Proportion	al Rates				
Occupancy 70-90%	\$ 965,42		\$	94,218.60	A5
Occupancy 100%	\$ 1,185,98	34.60	\$	314,778.60	A5
Loan Payment				(\$621,594.71)	
Alternative 2-Competive	Rates				
Occupancy 70-90%	\$ 943,49	95.20	\$	72,289.20	A6
Occupancy 100%	\$1,098,43	32.00	\$	227,226.00	A6
Loan Payment				(\$535,659.96)	
Alternative 2-Proportion	al Rates				
Occupancy 70-90%	\$ 984,50		\$	113,295.00	A7
Occupancy 100%	\$1,144,56	51.80	\$	273,355.80	A7
Loan Payment				(\$535,659.96)	

Notes:

1. Assumed occupancy rates based on 2018 and 2019.

2. All rates are for single finger with no upwind surcharge as follows:

Slip Length	EXISTING	COMPETITIVE	PROPORTIONAL
22	\$ 8.67	\$ 10.50	\$ 9.80
24	\$ 8.67	\$ 10.50	\$ 9.80
25	\$ 9.76	\$ 10.50	\$ 9.80
26	\$ 9.76	\$ 10.88	\$ 9.89
28	\$ 9.76	\$ 10.88	\$ 10.24
30	\$ 10.34	\$ 10.88	\$ 10.56
35	\$ 10.34	\$ 11.19	\$ 11.29
40	\$ 10.95	\$ 11.50	\$ 12.56
45	\$ 10.95	\$ 12.78	\$ 13.11
50	\$ 11.61	\$ 12.90	\$ 13.60
55	\$ 11.61	\$ 13.10	\$ 14.05

3. Loan payment is based upon a cost of \$50,000 for each slip and a 30-year loan at 4% interest.

4. Sq Ft rates are based upon a rate/ft that is proportional to the total area of the slip

5. Gain is based upon increase over Existing Rates 70-90% occupancy case.

6. See Appendix A figure noted for detailed analysis

The results show that an increase in revenue could be realized by reconfiguring these docks to longer slips. The increase is due to a higher occupancy rate than existing, which would likely be realized with longer and newer slips than existing. It should be noted, if the existing occupancy could be increased without capital improvements like the ones proposed in the two alternatives, the gain in revenue would be as much or more than for the two alternatives. Further, creating these longer slips would require removal of the existing docks and construction of new, the cost for which would require a loan. The payment on that loan would exceed any potential increase in revenue.

Considering this, the reconfiguration of the existing docks would realistically be done when the docks are at the end of their service life and were scheduled for replacement. In the interim, rates could be raised to be more in-line with comparable marinas and proportional to the area of the berth. This will increase revenue as shown, with no capital cost.

APPENDIX A

POTENTIAL REVENUE ANALYSIS FOR SLIP RECONFIGURATIONS

Appendix A0 Slip Mix Analysis Summary

Appendix A1 Comparison Solely on Occupancy Increases

Appendix A2 Comparison on Slip Fee Base Rate and Occupancy Increases

Appendix A3 Comparison on Slip Fee Base Rate and Occupancy Increases

Appendix A4 Comparison on Alternative 1's Reconfigured Slip Mix with Competitive Slip Fee Base Rate and Occupancy Increases

Appendix A5 Comparison on Alternative 1's Reconfigured Slip Mix with Proportional Slip Fee Base Rate and Occupancy Increases

Appendix A6 Comparison on Alternative 2's Reconfigured Slip Mix with Competitive Slip Fee Base Rate and Occupancy Increases

Appendix A7 Comparison on Alternative 2's Reconfigured Slip Mix with Proportional Slip Fee Base Rate and Occupancy Increases

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								Slip N	/lix Analys	is S	Summar	У								
								Pot	ential Annual	Rev	venue Gain	(Loss) by Scena	ario							
	Curre	nt Slip Con	gifuration La	yout	(Analysis on Slip F	ees and Occupancy	y Rate	es Increase)	Slip	Reco	onfiguration p	er Alternative 1 La	yout	Slip	Recon	nfiguration p	er Alterr	ative 2 La	yout	
		A1		А	2	A	43		A	44		A	\5	A	\6			β	7	
	Occ	upancy	A. Compet		B. Competitive	A. Proportion Slip	1			1	-	A. Proportion Slip			1	Competitive	-	ortion Slip	B. Pro	portion Slip
	Increas	e to 100%	Slip Fee Inc	rease	-	Fee Increase with	1				-			Slip Fee Increase			1			crease with
			with Curr		with 100%	Current Average	1				with 100%		100% Occupancy		1	vith 100%	1		1	Occupancy
			Averag		Occupancy Rate	Occupancy Rate		Rate	Average		ccupancy Rate	Occupancy Rate	Rate	Average	1	upancy Rate	Occupa	ncy Rate	Rate	
			Occupancy	Rate					Occupancy Rate					Occupancy Rate						
Dealer																				
Docks	s	118,160	¢ 2	,910	\$ 169,856	\$ 14,829	¢	120 270	\$ 46,629	¢	121,825	\$ 49,947	\$ 125,815	\$ 11,151	c .	40,078	~	25,585	¢	E4 091
L&M	\$ \$	148,514		,910				138,379 193,184	\$ (5,590)						-	187,148		87,710		54,981 218,375
Total	Ş	266,673	-),157	-	-		331,563			248,715		-			227,226	-	113,295		273,356
	7		7	,	<i>t</i> ,	7,	Ŧ	,	<u> </u>	Ŧ		7,	7,	7	7	,	7	,	Ŧ	
Evaluation	In thes	e scenarios	, the slip con	figrati	on remains as-is,	the highest annual	reven	nue gain is by	In the event that I	the o	docks are to be	replaced due to d	eterioration, the a	pproach is to have	longer	r slips to mat	ch mark	et trend fo	r bigge	er boats. In
						in the Central Bay								r annual revenue b						
	to "oth	er measure	es" to promo	te incr	ease of slip occup	ancy. Since this sce	enario	is with the		-				reconfigured layou			-	-		
	slip cor	figuration	remain as-is	"othe	er measures" prec	udes the need to ir	mplen	ment longer												
						nd decaying dock s														
				ocks, it	t may be a challen	ge to increase slip f	fees v	vhile	Need to consider	debt	t services if rep	placement is funded	d by loans. It will b	e the best option t	o not i	rely on loans	for dock	replacem	ent.	
	-		occupancy.																	
Recommendation			-			-				-				his slip fee will aut						-
	-					y for BMASP. The r					ocks J, L&M can	be replaced in pha	ases contingent up	on funding avaliab	ility. J-	-Dock Replac	ement is	the appro	priate	mid-term
		-				ture to optimize sli			BMASP Opportun	ity										
	reconfi	guration's i	new revenue	poter	ntial without the n	eed for another fee	e adju	istment.												
-			P Opportunit	y: Rais	e Slip Fee to "Pro	portion" rate as a w	vay to	o optimize exis	ting amenity at th	ie Ma	larina without o	capital investment.	Mid-term BMASP	Opportunity: Repla	ace J, I	L&M Docks w	vith long	er slips wh	en the	y are due
	for rep	lacement																		

Appendix A1: Revenue Potential Comparison Solely on Occupancy Increase

Description: Existing Layout and 2019 Berkeley Marina Slip Base Rate with Average Occupancy vs. Existing Layout and 2019 Berkeley Marina Slip Base Rate with 100% Occupancy

Revenue Gain Potential Summary (Occupancy Increase to 100%): J Dock: \$118,159.68 L & M Docks: \$148,513.80 TOTAL: \$266,673.48

ble A1-1											Dock									
			Current	Layout and 2	019 Berkeley	Marin	a Base Ra	ite		,	DUCK	Curr	ent Layout an	d 2019 Berkel	ey Marina Bas	e Rate	es with	1009	% Occupancy	
Slip Length (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Base	irrent Rate** S/LF)	Monthly Revenue	Annu	ial Revenue	Number of Available Slips	Available Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Bas	posed e Rate LF) ***		% Occupied Monthly Revenue	100% Occupied Annual Revenue
22		0	73%	0	0	\$	8.67	\$-	\$	-		0	100%	0	0	\$	8.67	\$	-	\$-
24	34	816	73%	25	600	\$	8.67	\$ 5,202.00	\$	62,424.00	34	816	100%	34	816	\$	8.67	\$	7,074.72	\$ 84,896.64
25	64	1600	73%	47	1175	\$	9.76	\$ 11,468.00	\$	137,616.00	64	1600	100%	64	1600	\$	9.76	\$	15,616.00	\$ 187,392.00
26		0	73%	0	0	\$	9.76	\$-	\$	-		0	100%	0	0	\$	9.76	\$	-	\$ -
28	52	1456	73%	38	1064	\$	9.76	\$ 10,384.64	\$	124,615.68	52	1456	100%	52	1456	\$	9.76	\$	14,210.56	\$ 170,526.72
30		0	83%	0	0	\$	10.34	\$-	\$	-		0	100%	0	0	\$	10.34	\$	-	\$ -
35		0	83%	0	0	\$	10.34	\$ -	\$	-	-	0	100%	0	0	\$	10.34	\$	-	\$ -
40		0	80%	0	0	\$	10.95	\$ -	\$	-		0	100%	0	0	\$	10.95	\$	-	\$ -
45		0	80%	0	0	\$	10.95	\$-	\$	-		0	100%	0	0	\$	10.95	\$	-	\$ -
50		0	90%	0	0	\$	11.61	\$ -	\$	-		0	100%	0	0	\$	11.61	\$	-	\$ -
55		0	90%	0	0	\$	11.61	\$ -	\$	-		0	100%	0	0	\$	11.61	\$	-	\$ -
TOTAL	150	3872	-	110	2839		-	\$ 27,054.64	\$ 3	324,655.68	150	3872	-	150	3872		-	\$	36,901.28	\$ 442,815.36
														Revenue G	ain Compare	d to E	xisting	\$	9,846.64	\$ 118,159.68

Table A1-2 💼

le A1-2									Lanc	I M Docks								
			Current	Layout and 20	019 Berkeley	Marina Base R	ate				Curr	ent Layout and	d 2019 Berkele	ey Marina Bas	e Rate	es with	100% Occupancy	/
Slip Length (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Current Base Rate** (\$/LF)	V	onthly venue	Annual Revenue	Number of Available Slips	Available Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Base	posed e Rate _F) ***	100% Occupied Monthly Revenue	100% Occupied Annual Revenue
22	2	44	73%	2	44	\$ 8.67	\$	381.48	\$ 4,577.76	2	44	100%	2	44	\$	8.67	\$ 381.48	\$ 4,577.76
24	1	24	73%	1	24	\$ 8.67	\$	208.08	\$ 2,496.96	1	24	100%	1	24	\$	8.67	\$ 208.08	\$ 2,496.96
25		0	73%	0	0	\$ 9.76	\$	-	\$ -		0	100%	0	0	\$	9.76	\$ -	\$ -
26	78	2028	73%	57	1482	\$ 9.76	\$ 1	14,464.32	\$ 173,571.84	78	2028	100%	78	2028	\$	9.76	\$ 19,793.28	\$ 237,519.36
28	49	1372	73%	36	1008	\$ 9.76	\$	9,838.08	\$ 118,056.96	49	1372	100%	49	1372	\$	9.76	\$ 13,390.72	\$ 160,688.64
30	22	660	83%	19	570	\$ 10.34	\$	5,893.80	\$ 70,725.60	22	660	100%	22	660	\$	10.34	\$ 6,824.40	\$ 81,892.80
35	22	770	83%	19	665	\$ 10.34	\$	6,876.10	\$ 82,513.20	22	770	100%	22	770	\$	10.34	\$ 7,961.80	\$ 95,541.60
40		0	80%	0	0	\$ 10.95	\$	-	\$ -		0	100%	0	0	\$	10.95	\$ -	\$ -
45	19	855	80%	16	720	\$ 10.95	\$	7,884.00	\$ 94,608.00	19	855	100%	19	855	\$	10.95	\$ 9,362.25	\$ 112,347.00
50		0	90%	0	0	\$ 11.61	\$	-	\$ -		0	100%	0	0	\$	11.61	\$ -	\$ -
55		0	90%	0	0	\$ 11.61	\$	-	\$ -		0	100%	0	0	\$	11.61	\$ -	\$ -
TOTAL	193	5753	-	150	4513	-	\$ 4	5,545.86	\$ 546,550.32	193	5753	-	193	5753		-	\$ 57,922.01	\$ 695,064.12
													Revenue Ga	ain Compare	d to E	xisting	\$ 12,376.15	\$ 148,513.80

Appendix A2: Revenue Potential Comparison on Slip Fee Base Rate and Occupancy Increases

Description: Existing Layout and 2019 Berkeley Marina Slip Base Rate with Average Occupancy vs. Existing Layout and 2019 Competitive Slip Base Rate with same avg occupancy & with 100% occupancy

Revenue Gain Potential Summary -- Competitive Base Rate with Average Occupancy / Competitive Base Rate With 100% Occupancy J-Dock: \$37,910.16 / \$169,855.68 L&M Docks: \$61,246.68 / \$226,609.68 TOTAL: **\$99,156.84** / **\$396,465.36**

	_																				
Table /	2 1											J Dock									
	12-1			Current	Layout and 2	019 Berkeley	Mari	na Base Ra	ite					Current Layout	t with Propose	d Rates based	on 2019 Competit	ive Base Rate			
ι	Slip ength (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Bas	2019 se Rate** (\$/LF)	Monthly Revenue	Annual Revenue	Number of Available Slips	Availablê Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Competitive Base Rate (\$/LF) ***	Average Monthly	Occupancy Annual		100% Monthly	cupancy Annual
	22		0	73%	0	0	\$	8.67	s -	\$ -		0	73%	0	0	\$ 10.50	s - s	-	\$	-	\$ -
	24	34	816	73%	25	600	\$	8.67	\$ 5,202.00	\$ 62,424.00	34	816	73%	25	600	\$ 10.50	\$ 6,300.00 \$	75,600.00	\$	8,568.00	\$ 102,816.00
	25	64	1600	73%	47	1175	\$	9.76	\$ 11,468.00	\$ 137,616.00	64	1600	73%	47	1175	\$ 10.50	\$ 12,337.50 \$	148,050.00	\$	16,800.00	\$ 201,600.00
	26		0 73% 0 0 \$ 9.76 \$ - \$ 0 73% 0 0 \$ 10.88 \$ - \$ </td <td>-</td> <td>\$</td> <td>-</td> <td>\$ -</td>														-	\$	-	\$ -	
	28	52	1456 73% 38 1064 \$ 9.76 \$ 10,384.64 \$ 124,615.68 52 1456 73% 38 1064 \$ 10.88 \$ 11,576.32 \$ 138,915.4														138,915.84	\$	15,841.28	\$ 190,095.36	
	30		0	83%	0	0	S.	10.34	\$-	\$ -		0	83%	0	0	\$ 10.88	s - s	-	\$	-	\$ -
	35		0	83%	0	0	S.	10.34	\$-	\$-		0	83%	0	0	\$ 11.19	s - s	-	\$	-	\$ -
	40		0	80%	0	0	S.	10.95	\$-	\$ -		0	80%	0	0	\$ 11.50	s - s	-	\$	-	\$ -
	45		0	80%	0	0	S.	10.95	\$ -	\$ -		0	80%	0	0	\$ 12.78	s - s	-	\$	-	\$ -
	50		0	90%	0	0	S.	11.61	\$-	\$ -		0	90%	0	0	\$ 12.90	s - s	-	\$	-	\$ -
	55		0	90%	0	0	S.	11.61	\$ -	S -		0	90%	0	0	\$ 13.10	s - s	-	\$	-	\$ -
1	OTAL	150	3872	-	110	2839		-	\$ 27,054.64	\$ 324,655.68	150	3872	-	110	2839	-	\$ 30,213.82 \$	362,565.84	\$	41,209.28	\$ 494,511.36
_			150 <u>3872</u> - <u>110</u> <u>2839</u> - <u>\$ 27,054.64</u> <u>\$ 324,655.68</u> <u>150</u> <u>3872</u> - <u>110</u> <u>2839</u> - <u>\$ 30,213.82</u> <u>\$ 362,565.84</u> <u>\$ 41,20</u>													14,154.64	\$ 169,855.68				
	_																				

Table A2-2											La	nd M Docks									
			Current	Layout and 20	019 Berkeley	/ Marin	na Base Ra	te					C	urrent Layout	with Propose	d Rates based	on 2019 Compe	titive Base Rate			
Slip Length (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Base	2019 e Rate** \$/LF)	Monthly Revenue	Annual R	levenue	Number of Available Slips	Available Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Competitive Base Rate (\$/LF) ***	Avera <u>o</u> Monthly	ge Occupancy Annual	100 Month)ccupancy Annual
22	2	44	73%	2	44	\$	8.67	\$ 381.48	\$ 4	4,577.76	2	44	73%	2	44	\$ 10.50	\$ 462.00	\$ 5,544.00	\$ 462.00	\$	5,544.00
24	1	24	73%	1	24	\$	8.67	\$ 208.08	\$ 2	2,496.96	1	24	73%	1	24	\$ 10.50	\$ 252.00	\$ 3,024.00	\$ 252.00	\$	3,024.00
25		0	73%	0	0	\$	9.76	\$ -	\$	-		0	73%	0	0	\$ 10.50	s -	\$ -	\$ -	\$	-
26	78	2028	73%	57	1482	\$	9.76	\$ 14,464.32	\$ 173	3,571.84	78	2028	73%	57	1482	\$ 10.88	\$ 16,124.16	\$ 193,489.92	\$ 22,064.64	\$	264,775.68
28	49	1372	73%	36	1008	\$	9.76	\$ 9,838.08	\$ 118	3,056.96	49	1372	73%	36	1008	\$ 10.88	\$ 10,967.04	\$ 131,604.48	\$ 14,927.36	S	179,128.32
30	22	660	83%	19	570	S -	10.34	\$ 5,893.80	\$ 70	,725.60	22	660	83%	19	570	\$ 10.88	\$ 6,201.60	\$ 74,419.20	\$ 7,180.80	\$	86,169.60
35	22	770	83%	19	665	S -	10.34	\$ 6,876.10	\$ 82	,513.20	22	770	83%	19	665	\$ 11.19	\$ 7,441.35	\$ 89,296.20	\$ 8,616.30	S	103,395.60
40		0	80%	0	0	S .	10.95	\$ -	\$	-		0	80%	0	0	\$ 11.50	ş -	\$ -	\$ -	\$	-
45	19	855	80%	16	720	S -	10.95	\$ 7,884.00	\$ 94	,608.00	19	855	80%	16	720	\$ 12.78	\$ 9,201.60	\$ 110,419.20	\$ 10,926.90	S	131,122.80
50		0	90%	0	0	S	11.61	\$ -	\$	-		0	90%	0	0	\$ 12.90	\$ -	\$ -	\$ -	\$	-
55		0	90%	0	0	S	11.61	\$ -	\$	-		0	90%	0	0	\$ 13.10	\$ -	\$ -	\$ -	\$	-
TOTAL	193	5753	-	150	4513		-	\$ 45,545.86	\$ 546,	550.32	193	5753	-	150	4513	-	\$ 50,649.75	\$ 607,797.00	\$ 64,430.00	\$	773,160.00
														Revenue (Gain Compare	ed to Existing	\$ 5,103.89	\$ 61,246.68	\$ 18,884.14	\$	226,609.68

Appendix A3: Revenue Potential Comparison on Slip Fee Base Rate and Occupancy Increases

Description: Existing Layout and 2019 Berkeley Marina Slip Base Rate with Average Occupancy vs. Existing Layout and 2019 Proportional Slip Base Rate with same avg occupancy & with 100% occupancy

Revenue Gain Potential Summary -- Proportional Base Rate With Average Occupancy / Proportional Base Rate With 100% Occupancy

J-Dock: \$14,828.64 / \$138,379.20 L&M Docks: \$36,788.28 / \$193,184.28 TOTAL: \$51,616.92 / \$331,563.48

able A3-1																				
										_	J Dock									
			Current	Layout and 2	019 Berkeley	Marin	na Base Ra	te					Cu	rrent Layout v	with Rates base	d on Proportio	nal Base Rate			
Slip Length (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Base	2019 e Rate** \$/LF)	Monthly Revenue	Annual Revenue	Number of Available Slips	Available Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Proportional Base Rate (\$/LF)	Ave Monti	erage Occupancy hly Annual	М	100% onthly	Occupancy Annual
22		0	73%	0	0	\$	8.67	\$ -	\$ -		0	73%	0	0	\$ 9.80	\$ -	s -	\$.	- \$	-
24	34	816	73%	25	600	\$	8.67	\$ 5,202.00			816	73%	25	600	\$ 9.80	\$ 5,880.00	\$ 70,560.00	\$ 7,996		95,961.60
25	64	1600	73%	47	1175	\$	9.76	\$ 11,468.00	\$ 137,616.00	64	1600	73%	47	1175	\$ 9.80	\$ 11,515.00	\$ 138,180.00	\$ 15,680	.00 \$	188,160.00
26		0	73%	0	0	\$	9.76	\$ -	\$ -		0	73%	0	0	\$ 9.89	\$ -	\$ -	\$ -	- \$	-
28	52	1456	73%	38	1064	\$	9.76	\$ 10,384.64	\$ 124,615.68	52	1456	73%	38	1064	\$ 10.24	\$ 10,895.36	\$ 130,744.32	\$ 14,909	.44 \$	178,913.28
30		0	83%	0	0	\$	10.34	\$ -	\$ -		0	83%	0	0	\$ 10.56	\$ -	\$ -	\$ -	- \$	-
35		0	83%	0	0	\$	10.34	\$ -	\$ -		0	83%	0	0	\$ 11.29	\$ -	s -	s -	- \$	-
40		0	80%	0	0	\$	10.95	\$ -	\$ -		0	80%	0	0	\$ 12.56	\$ -	\$ -	\$.	- \$	-
45		0	80%	0	0	\$	10.95	\$ -	\$ -		0	80%	0	0	\$ 13.11	\$ -	\$ -	\$ -	- \$	-
50		0	90%	0	0	\$	11.61	s -	s -		0	90%	0	0	\$ 13.60	\$ -	s -	\$	- \$	-
55		0	90%	0	0	\$	11.61	s -	\$ -		0	90%	0	0	\$ 14.05	s -	s -	\$	- ş	-
TOTAL	150	3872	-	110	2839		-	\$ 27,054.64	\$ 324,655.68	150	3872	-	110	2839	-	\$ 28,290.36	\$ 339,484.32	\$ 38,586	.24 \$	463,034.88
													Revenue	Gain Compar	ed to Existing	\$ 1,235.72	\$ 14,828.64	\$ 11,531.	60 \$	138,379.20

Table A3-2

												L and M Do	cks									
			Current	Layout and 2(019 Berkeley	y Mari	ina Base R	ate						Cu	rrent Layout v	vith I	Rates based	on Proportion	al Base Rate			
Slip Length (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Bas	2019 se Rate** (\$/LF)	Monthly Revenue	An	nual Revenue	Number of Available Slips	Available Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Ba	portional ase Rate (\$/LF)	Aver Monthl	age Occupancy y Annual		10 Month	Occupancy Annual
22	2	44	73%	2	44	\$	8.67	\$ 381.4	8 \$	4,577.76	2	44	73%	2	44	S.	9.80	\$ 431.20	\$ 5,17	4.40	\$ 431.20	\$ 5,174.40
24	1	24	73%	1	24	\$	8.67	\$ 208.0	8 \$	2,496.96	1	24	73%	1	24	S.	9.80	\$ 235.20	\$ 2,82	2.40	\$ 235.20	\$ 2,822.40
25		0	73%	0	0	\$	9.76	\$	- \$	-		0	73%	0	0	S	9.80	ş -	\$	-	s -	\$ -
26	78	2028	73%	57	1482	\$	9.76	\$ 14,464.3	2\$	173,571.84	78	2028	73%	57	1482	S	9.89	\$ 14,656.98	\$ 175,88	3.76	\$ 20,056.92	\$ 240,683.04
28	49	1372	73%	36	1008	\$	9.76	\$ 9,838.0	8 \$	118,056.96	49	1372	73%	36	1008	\$	10.24	\$ 10,321.92	\$ 123,86	3.04	\$ 14,049.28	\$ 168,591.36
30	22	660	83%	19	570	\$	10.34	\$ 5,893.8	0\$	70,725.60	22	660	83%	19	570	\$	10.56	\$ 6,019.20	\$ 72,23	0.40	\$ 6,969.60	\$ 83,635.20
35	22	770	83%	19	665	\$	10.34	\$ 6,876.1	0\$	82,513.20	22	770	83%	19	665	\$	11.29	\$ 7,507.85	\$ 90,09	4.20	\$ 8,693.30	\$ 104,319.60
40		0	80%	0	0	\$	10.95	\$	- \$	-		0	80%	0	0	\$	12.56	\$ -	\$	-	\$ -	\$ -
45	19	855	80%	16	720	\$	10.95	\$ 7,884.0	0\$	94,608.00	19	855	80%	16	720	\$	13.11	\$ 9,439.20	\$ 113,27	0.40	\$ 11,209.05	\$ 134,508.60
50		0	90%	0	0	\$	11.61	\$	- \$	-		0	90%	0	0	\$	13.60	\$ -	\$	-	\$ -	\$ -
55		0	90%	0	0	\$	11.61	\$	- \$	-		0	90%	0	0	\$	14.05	\$ -	\$	-	s -	\$ -
TOTAL	193	5753	-	150	4513		-	\$ 45,545.8	5 \$	546,550.32	193	5753	-	150	4513		-	\$ 48,611.55	\$ 583,33	8.60	\$ 61,644.55	\$ 739,734.60
														Revenue	Gain Compar	ed to	Existing	\$ 3,065.69	\$ 36,78	8.28	\$ 16,098.69	\$ 193,184.28

Appendix A4: Revenue Potential Comparison on Alternative 1's Reconfigured Slip Mix with Competitive Slip Fee Base Rate and Occupancy Increases

Description: Existing Layout and 2019 Berkeley Marina Slip Base Rate with Average Occupancy vs. Proposed Alternative 1 Layout and Competitive Base Rate with Same Avg Occupancy & With 100% Occupancy

Revenue Gain Potential Summary -- Proposed Alternative 1 Layout: Competitive Base Rate with Average Occupancy / Competitive Base Rate With 100% Occupancy TOTAL: **\$41,038.20** / **\$248,715.00** J-Dock: \$46,628.52 / \$121,825.32 L&M Docks: \$(5,590.32) / \$126,889.68

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e A4-1										٦٢	Dock									
			Curren	t Layout and	2019 Berkele	y Marina Base I	Rate		ALT 1					Corr	ıpetit	ive Rates (2019)	Rates)			
Slip Length (ft)	No. Slips	Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Current Base Rate** (\$/LF)	Monthly Revenue	Annual Revenue	No. Slips	Slip LF	Assumed Occupancy Rate*		Occupied Slip LF	Competitive Base Rate (\$/LF) ***	2	Averag Monthly	ge Occupancy Annual	10 Monti		ccupancy Annual
22		0	73%	0	0	\$ 8.67	\$ -	\$		0	73%	0	0	\$ 10.50	5	-	\$ -	\$ -	\$	-
24	34	816	73%	25	600	\$ 8.67	\$ 5,202.00	\$ 62,424.00		0	73%	0	0	\$ 10.50	\$	-	\$ -	\$ -	\$	-
25	64	1600	73%	47	1175	\$ 9.76	\$ 11,468.00	\$ 137,616.00		0	73%	0	0	\$ 10.50) \$	-	\$ -	\$ -	\$	-
26		0	73%	0	0	\$ 9.76	\$ -	\$		0	73%	0	0	\$ 10.88	\$	-	\$ -	\$ -	s	-
28	52	1456	73%	38	1064	\$ 9.76	\$ 10,384.64	\$ 124,615.68		0	73%	0	0	\$ 10.88	\$	-	\$ -	\$ -	\$	-
35		0	83%	0	0	\$ 10.34	\$-	\$ -	95	3325	83%	79	2765	\$ 11.19	\$	30,940.35	\$ 371,284.20	\$ 37,206.75	i \$	446,481.00
TOTAL	150	3872	-	110	2839	-	\$ 27,054.64	\$ 324,655.68	95	3325	-	79	2765	-	\$	30,940.35	\$ 371,284.20	\$ 37,206.75	5 \$	446,481.00
	•												F	Revenue Gaii	n \$	3,885.71	\$ 46,628.52	\$ 10,152.11	\$	121,825.32
- 44 0																				

Table A4 -2

A4 -2										L and M	M Docks									
			Curren	nt Layout and	2019 Berkele	y Marina Base	Rate		ALT 1					Com	npetit	ive Rates (2019)	Rates)			
Slip Length (ft)	No. Slips	Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Current Base Rate** (\$/LF)	Monthly Revenue	Annual Revenue	No. Slips	Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Competitive Base Rate (\$/LF) ***	2	Avera Monthly	ge Occupancy Annual	100 Monthly	% Occu / An	ipancy inual
22	2	44	73%	2	44	\$ 8.67	\$ 381.48	\$ 4,577.76		0	73%	0	0	\$ 10.50	5	-	\$ -	\$ -	\$	-
24	1	24	73%	1	24	\$ 8.67	\$ 208.08	\$ 2,496.96		0	73%	0	0	\$ 10.50	5	-	\$ -	\$ -	\$	-
25		0	73%	0	0	\$ 9.76	\$	5 -		0	73%	0	0	\$ 10.50	\$	-	\$ -	\$ -	\$	-
26	78	2028	73%	57	1482	\$ 9.76	\$ 14,464.32	\$ 173,571.84		0	73%	0	0	\$ 10.88	\$	-	\$ -	\$ -	\$	-
28	49	1372	73%	36	1008	\$ 9.76	\$ 9,838.08	\$ 118,056.96		0	73%	0	0	\$ 10.88	\$	-	\$ -	\$ -	\$	-
30	22	660	83%	19	570	\$ 10.34	\$ 5,893.80	\$ 70,725.60		0	83%	0	0	\$ 10.88	\$	-	\$ -	\$ -	\$	-
35	22	770	83%	19	665	\$ 10.34	\$ 6,876.10	\$ 82,513.20		0	83%	0	0	\$ 11.19	\$	-	\$ -	\$ -	\$	-
40		0	80%	0	0	\$ 10.95	\$-	\$ -	122	4880	80%	98	3920	\$ 11.50	\$	45,080.00	\$ 540,960.00	\$ 56,120.00	\$	673,440.00
45	19	855	80%	16	720	\$ 10.95	\$ 7,884.00	\$ 94,608.00		0	80%	0	0	\$ 12.78	\$	-	\$ -	\$ -	\$	-
TOTAL	193	5753	-	150	4513	-	\$ 45,545.86	\$ 546,550.32	122	4880	-	98	3920	-	\$	45,080.00	\$ 540,960.00	\$ 56,120.00	\$	673,440.00
-												Reve	nue Gain Compare	ed to Existing	g \$	(465.86)	\$ (5,590.32)	\$ 10,574.14	\$	126,889.68

Appendix A5: Revenue Potential Comparison on Alternative 1's Reconfigured Slip Mix with Proportional Slip Fee Base Rate and Occupancy Increases

Description: Existing Layout and 2019 Berkeley Marina Slip Base Rate with Average Occupancy vs. Proposed Alternative 1 Layout and Proportional Base Rate with Same Avg Occupancy & With 100% Occupancy

Revenue Gain Potential Summary -- Proposed Alternative 1 Layout: Proportional Base Rate with Average Occupancy / Proportional Base Rate With 100% Occupancy J-Dock: \$49,946.52 / \$125,815.32 L&M Docks: \$44,272.08 / \$188,963.28 TOTAL: **\$94,218.60** / **\$314,778.60**

le A5-1																				
										J Do	ock									
			Currer	nt Layout and	2019 Berkele	ey Marina Base	Rate						F	Proposed ALT 1 wi	ith Prop	ortional Rate	IS			
Slip Length (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	2019 Base Rate** (\$/LF)	Monthly Revenue	Annual Revenue	Number of Available Slips	Available Slip LF	Assumed Occupancy Rate*	Assumed Occupied <u>Slips</u>	Occupied Slip LF	Proportional Base Rate (\$/LF)		Avera <u>c</u> Monthly	je Occupancy Annual	10 Mont	00% Oco hly /	cupancy Annual
22		0	73%	0	0	\$ 8.67	\$ -	\$ -		0	73%	Ő	0	\$ 9.80	\$	-	\$ -	\$ -	\$	-
24	34	816	73%	25	600	\$ 8.67	\$ 5,202.00	\$ 62,424.00		0	73%	0	0	\$ 9.80	\$	-	\$ -	\$ -	\$	-
25	64	1600	73%	47	1175	\$ 9.76	\$ 11,468.00	\$ 137,616.00		0	73%	0	0	\$ 9.80	\$	-	\$ -	\$ -	\$	-
26		0	73%	0	0	\$ 9.76	-	\$ -		0	73%	0	0	\$ 9.89		-	\$ -	\$ -	\$	-
28	52	1456	73%	38	1064	\$ 9.76	\$ 10,384.64	\$ 124,615.68		0	73%	0	0	\$ 10.24	-	-	\$ -	\$ -	\$	-
30		0	83%	0	0	\$ 10.34	\$ -	\$ -		0	83%	0	0	\$ 10.56		-	\$ -	\$ -	\$	-
35		0	83%	0	0	\$ 10.34	\$ -	\$ -	95	3325	83%	79	2765	\$ 11.29		31,216.85	\$ 374,602.20	\$ 37,539.	25 \$	450,471.00
40		0	80%	0	0	\$ 10.95	\$ -	\$ -		0	80%	0	0	\$ 12.56	\$	-	\$ -	\$ -	\$	-
45		0	80%	0	0	\$ 10.95	\$ -	\$ -		0	80%	0	0	\$ 13.11	\$	-	\$ -	\$ -	\$	-
50		0	90%	0	0	\$ 11.61	\$ -	\$ -		0	90%	0	0	\$ 13.60	\$	-	\$ -	\$ -	\$	-
55		0	90%	0	0	\$ 11.61	\$ -	\$ -		0	90%	0	0	\$ 14.05	\$	-	\$ -	\$ -	\$	-
TOTAL	150	3872	-	110	2839	-	\$ 27,054.64	\$ 324,655.68	95	3325	-	79	2765	-	\$	31,216.85	\$ 374,602.20	\$ 37,539.	25 \$	450,471.00
												Revenu	e Gain Comp	pared to Existing	\$	4,162.21	\$ 49,946.52	\$ 10,484.	51 \$	125,815.32

Table A5	5-2										L and M	Docks										
10010710	, ,			Curren	t Layout and	2019 Berkele	y Marina Base I	Rate						P	roposed ALT 1 wi	h Proportior	al Rates					
1	Slip Length (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Current Base Rate** (\$/LF)	Monthly Revenue	Annual Revenue	Number of Available Slips	Available Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Proportional Base Rate (\$/LF)		Average onthly	Occupancy Annual		100% Monthly	Occup Anr	· ·
	22	2	44	73%	2	44	\$ 8.67	\$ 381.48	\$ 4,577.76		0	73%	0	0	\$ 9.80	\$		\$-	\$	-	\$	-
	24	1	24	73%	1	24	\$ 8.67	\$ 208.08	\$ 2,496.96		0	73%	0	0	\$ 9.80	\$	- 1	\$-	\$	-	\$	-
	25		0	73%	0	0	\$ 9.76	\$ -	\$ -		0	73%	0	0	\$ 9.80	\$	- 1	\$-	\$	-	\$	-
	26	78	2028	73%	57	1482	\$ 9.76	\$ 14,464.32	\$ 173,571.84		0	73%	0	0	\$ 9.89	\$	- 1	\$-	\$	-	\$	-
	28	49	1372	73%	36	1008	\$ 9.76	\$ 9,838.08	\$ 118,056.96		0	73%	0	0	\$ 10.24	\$	- 1	\$-	\$	-	\$	-
	30	22	660	83%	19	570	\$ 10.34	\$ 5,893.80	\$ 70,725.60		0	83%	0	0	\$ 10.56	\$	- 1	\$-	\$	-	\$	-
	35	22	770	83%	19	665	\$ 10.34	\$ 6,876.10	\$ 82,513.20		0	83%	0	0	\$ 11.29	\$	- 1	\$ -	\$	-	\$	-
	40		0	80%	0	0	\$ 10.95	\$ -	\$ -	122	4880	80%	98	3920	\$ 12.56	\$ 49,2	35.20	\$ 590,822.40	S	61,292.80	s	735,513.60
	45	19	855	80%	16	720	\$ 10.95	\$ 7,884.00	\$ 94,608.00		0	80%	0	0	\$ 13.11	\$	- 1	\$ -	\$	-	\$	-
	50		0	90%	0	0	\$ 11.61	\$ -	\$ -		0	90%	0	0	\$ 13.60	\$	- 1	\$ -	\$	-	\$	-
[55		0	90%	0	0	\$ 11.61	\$ -	\$ -		0	90%	0	0	\$ 14.05	\$	- !	\$ -	\$	-	\$	-
	TOTAL	193	5753	-	150	4513	-	\$ 45,545.86	\$ 546,550.32	122	4880	-	98	3920	-	\$ 49,2	35.20	\$ 590,822.40	S	61,292.80	\$	735,513.60
													Revenu	e Gain Comp	ared to Existing	\$ 3,6	39.34	\$ 44,272.08	\$	15,746.94	\$	188,963.28

Appendix A6: Revenue Potential Comparison on Alternative 2's Reconfigured Slip Mix with Competitive Slip Fee Base Rate and Occupancy Increases

Description: Existing Layout and 2019 Berkeley Marina Slip Base Rate with Average Occupancy vs. Proposed Alternative 2 Layout and Competitive Base Rate with Same Avg Occupancy & With 100% Occupancy

Revenue Gain Potential Summary -- Proposed Alternative 2 Layout: Proportional Base Rate with Average Occupancy / Proportional Base Rate With 100% Occupancy J-Dock: \$11,151.12 / \$40,078.32 L&M Docks: \$61,138.08 / \$187,147.68 TOTAL: **\$72,289.20**/ **\$227,226.00**

Table A6-1										J Do	ck								
			Current	Layout and 2	019 Berkeley	Marina Base Ra	te							Proposed Alt 2	with Competitive Ra	ites (2019 Rates)			
Slip Length (ft)	No. Slips	Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Current Base Rate** (\$/LF)	Monthly Revenue	Annual Revenue	No. Slips	Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Competitive Base Rate (\$/LF)		ge Occupancy Annual	Mo	100% nthly	Occupancy Annual
22		0	73%	0	0	\$ 8.67	\$ -	\$ -		0	73%	0	0	\$ 10.50	\$ -	\$ -	ş -	\$	-
24	34	816	73%	25	600	\$ 8.67	\$ 5,202.00	\$ 62,424.00		0	73%	0	0	\$ 10.50	\$ -	\$ -	\$ -	\$	-
25	64	1600	73%	47	1175	\$ 9.76	\$ 11,468.00	\$ 137,616.00		0	73%	0	0	\$ 10.50	\$ -	\$ -	\$ -	\$	-
26		0	73%	0	0	\$ 9.76	\$ -	\$ -		0	73%	0	0	\$ 10.88	\$ -	\$ -	\$ -	\$	-
28	52	1456	73%	38	1064	\$ 9.76	\$ 10,384.64	\$ 124,615.68		0	73%	0	0	\$ 10.88	\$ -	\$ -	\$ -	\$	-
30		0	83%	0	0	\$ 10.34	\$ -	\$ -	25	750	83%	21	630	\$ 10.88	\$ 6,854.40	\$ 82,252.80	\$ 8,160.	00 \$	97,920.00
35		0	83%	0	0	\$ 10.34	\$ -	\$ -		0	83%	0	0	\$ 11.19	\$ -	\$ -	\$ -	\$	-
40		0	80%	0	0	\$ 10.95	\$ -	\$ -	9	360	80%	8	320	\$ 11.50	\$ 3,680.00	\$ 44,160.00	\$ 4,140.	00 \$	49,680.00
45		0	80%	0	0	\$ 10.95	\$ -	\$ -		0	80%	0	0	\$ 12.78	\$ -	\$ -	\$ -	\$	-
50		0	90%	0	0	\$ 11.61	\$ -	\$ -	18	900	90%	17	850	\$ 12.90	\$ 10,965.00	\$ 131,580.00	\$ 11,610.	00 \$	139,320.00
55		0	90%	0	0	\$ 11.61	\$ -	\$ -	9	495	90%	9	495	\$ 13.10	\$ 6,484.50	\$ 77,814.00	\$ 6,484.	50 \$	77,814.00
TOTAL	. 150	3872	-	110	2839	-	\$ 27,054.64	\$ 324,655.68	61	2505	-	55	2295	-	\$ 27,983.90	\$ 335,806.80	\$ 30,394.	50 \$	364,734.00
												Revenu	ue Gain Comp	ared to Existing	\$ 929.26	\$ 11,151.12	\$ 3,339.8	36 \$	40,078.32
																			•

Table AG	~ Г										L and MI	Docks							
Table A6 -	·2			Current	Layout and 2	019 Berkeley	Marina Base Ra	ite		0					Proposed Alt 2	with Competitive R	ates (2019 Rates)		
Len	lip ngth ft)	No. Slips	Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Current Base Rate** (\$/LF)	Monthly Revenue	Annual Revenue	No. Slips	Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Competitive Base Rate (\$/LF)		ge Occupancy Annual		% Occupied thly Revenue
2	22	2	44	73%	2	44	\$ 8.67	\$ 381.48	\$ 4,577.76		0	73%	0	0	\$ 10.50	\$ -	\$ -	\$ -	\$ -
2	24	1	24	73%	1	24	\$ 8.67	\$ 208.08	\$ 2,496.96		0	73%	0	0	\$ 10.50	\$ -	\$ -	\$ -	\$ -
2	25		0	73%	0	0	\$ 9.76	\$ -	\$ -	25	625	73%	19	475	\$ 10.50	\$ 4,987.50	\$ 59,850.00	\$ 6,562.50	\$ 78,750.00
2	26	78	2028	73%	57	1482	\$ 9.76	\$ 14,464.32	\$ 173,571.84		0	73%	0	0	\$ 10.88	\$ -	\$ -	\$ -	\$ -
2	28	49	1372	73%	36	1008	\$ 9.76	\$ 9,838.08	\$ 118,056.96		0	73%	0	0	\$ 10.88	\$ -	\$ -	\$ -	\$ -
3	30	22	660	83%	19	570	\$ 10.34	\$ 5,893.80	\$ 70,725.60		0	83%	0	0	\$ 10.88	\$ -	\$ -	\$ -	\$ -
3	35	22	770	83%	19	665	\$ 10.34	\$ 6,876.10	\$ 82,513.20		0	83%	0	0	\$ 11.19	\$ -	\$ -	\$ -	\$ -
4	ю		0	80%	0	0	\$ 10.95	\$ -	\$ -	42	1680	80%	34	1360	\$ 11.50	\$ 15,640.00	\$ 187,680.00	\$ 19,320.00	\$ 231,840.00
4	15	19	855	80%	16	720	\$ 10.95	\$ 7,884.00	\$ 94,608.00	40	1800	80%	32	1440	\$ 12.78	\$ 18,403.20	\$ 220,838.40	\$ 23,004.00	\$ 276,048.00
5	50		0	90%	0	0	\$ 11.61	\$ -	\$ -	19	950	90%	18	900	\$ 12.90	\$ 11,610.00	\$ 139,320.00	\$ 12,255.00	\$ 147,060.00
5	55		0	90%	0	0	\$ 11.61	\$ -	\$ -		0	90%	0	0	\$ 13.10	\$ -	\$ -	\$ -	\$ -
TO	TAL	193	5753	-	150	4513	-	\$ 45,545.86	\$ 546,550.32	126	5055	-	103	4175	-	\$ 50,640.70	\$ 607,688.40	\$ 61,141.50	\$ 733,698.00
													Revenu	ie Gain Comp	ared to Existing	\$ 5,094.84	\$ 61,138.08	\$ 15,595.64	\$ 187,147.68

Appendix A7: Revenue Potential Comparison on Alternative 2's Reconfigured Slip Mix with Proportional Slip Fee Base Rate and Occupancy Increases

Description: Existing Layout and 2019 Berkeley Marina Slip Base Rate with Average Occupancy vs. Proposed Alternative 1 Layout and Proportional Base Rate with Same Avg Occupancy & With 100% Occupancy

Revenue Gain Potential Summary -- Proposed Alternative 1 Layout: Proportional Base Rate with Average Occupancy / Proportional Base Rate With 100% Occupancy J-Dock: \$25,585.32 / \$54,980.52 L&M Docks: \$87,709.68 / \$218,375.28 TOTAL: **\$113,295.00** / **\$273,355.80**

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le A7-1										J Doc	ik							
			Current	Layout and 20) 19 Berkeley	Marina Base Ra	ate						Propos	ed ALT 2 with Pro	portional Rates (201	9)		
Slip Lengt (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Current Base Rate** (\$/LF)	Monthly Revenue	Annual Revenue	Number of Available Slips	Available Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Proportional Base Rate (\$/LF)		ge Occupancy Annual	10 Month	0% Occupancy Ily Annual
22		0	73%	0	0	\$ 8.67	\$ -	s -		0	73%	0	0	\$ 9.80	\$ -	\$ -	\$ -	\$ -
24	34	816	73%	25	600	\$ 8.67	\$ 5,202.00	\$ 62,424.00		0	73%	0	0	\$ 9.80	\$ -	\$ -	s -	\$ -
25	64	1600	73%	47	1175	\$ 9.76	\$ 11,468.00	\$ 137,616.00		0	73%	0	0	\$ 9.80	s -	\$ -	s -	\$ -
26		0	73%	0	0	\$ 9.76	\$ -	s -		0	73%	0	0	\$ 9.89	\$ -	\$ -	s -	\$ -
28	52	1456	73%	38	1064	\$ 9.76	\$ 10,384.64	\$ 124,615.68		0	73%	0	0	\$ 10.24	\$ -	\$ -	\$ -	\$ -
30		0	83%	0	0	\$ 10.34	\$ -	\$ -	25	750	83%	21	630	\$ 10.56	\$ 6,652.80	\$ 79,833.60	\$ 7,920.00	\$ 95,040.00
35		0	83%	0	0	\$ 10.34	\$ -	\$ -		0	83%	0	0	\$ 11.29	\$ -	\$ -	\$ -	\$ -
40		0	80%	0	0	\$ 10.95	\$ -	\$ -	9	360	80%	8	320	\$ 12.56	\$ 4,019.20	\$ 48,230.40	\$ 4,521.60	\$ 54,259.20
45		0	80%	0	0	\$ 10.95	\$ -	\$ -		0	80%	0	0	\$ 13.11	\$ -	\$ -	\$ -	\$ -
50		0	90%	0	0	\$ 11.61	\$ -	\$ -	18	900	90%	17	850	\$ 13.60	\$ 11,560.00	\$ 138,720.00	\$ 12,240.00	\$ 146,880.00
55		0	90%	0	0	\$ 11.61	\$ -	\$ -	9	495	90%	9	495	\$ 14.05	\$ 6,954.75	\$ 83,457.00	\$ 6,954.75	\$ 83,457.00
TOTA	L 150	3872	-	110	2839	-	\$ 27,054.64	\$ 324,655.68	61	2505	-	55	2295	-	\$ 29,186.75	\$ 350,241.00	\$ 31,636.35	\$ 379,636.20
_												Revenu	ue Gain Comp	ared to Existing	\$ 2,132.11	\$ 25,585.32	\$ 4,581.71	\$ 54,980.52

A7 -2												L and M	Docks					
·/ -2			Current	Layout and 2	019 Berkeley	Marir	na Base R	ate							Propos	ed ALT 2 with Pro	portional Rates (20	19)
Slip Length (ft)	Number of Available Slips	Available Slip LF	Average Occupancy Rate*	Average Occupied Slips	Occupied Slip LF	Bas	urrent e Rate** (\$/LF)		Monthly Revenue	Annual Revenue	Number of Available Slips	Available Slip LF	Assumed Occupancy Rate*	Assumed Occupied Slips	Occupied Slip LF	Proportional Base Rate (\$/LF)		age Oc
22	2	44	73%	2	44	\$	8.67	\$	381.48	\$ 4,577.76		0	73%	0	0	\$ 9.80	\$ -	\$
24	1	24	73%	1	24	\$	8.67	\$	208.08	\$ 2,496.96		0	73%	0	0	\$ 9.80	\$ -	\$
25		0	73%	0	0	\$	9.76	\$	-	\$ -	25	625	73%	19	475	\$ 9.80	\$ 4,655.00	\$
26	78	2028	73%	57	1482	\$	9.76	\$	14,464.32	\$ 173,571.84		0	73%	0	0	\$ 9.89	s -	\$
28	49	1372	73%	36	1008	\$	9.76	S	9,838.08	\$ 118,056.96		0	73%	0	0	\$ 10.24	s -	\$
30	22	660	83%	19	570	\$	10.34	s	5,893.80	\$ 70,725.60		0	83%	0	0	\$ 10.56	\$ -	\$
35	22	770	83%	19	665	\$	10.34	s	6,876.10	\$ 82,513.20		0	83%	0	0	\$ 11.29	\$ -	\$
40		0	80%	0	0	\$	10.95	\$	-	\$ -	42	1680	80%	34	1360	\$ 12.56	\$ 17,081.60	S.
45	19	855	80%	16	720	\$	10.95	\$	7,884.00	\$ 94,608.00	40	1800	80%	32	1440	\$ 13.11	\$ 18,878.40	S.
50		0	90%	0	0	\$	11.61	\$	-	\$ -	19	950	90%	18	900	\$ 13.60	\$ 12,240.00	S.
55		0	90%	0	0	S	11.61	\$	-	\$ -		0	90%	0	0	\$ 14.05	\$ -	\$
TOTAL	193	5753	-	150	4513		-	\$	45,545.86	\$ 546,550.32	126	5055	-	103	4175	-	\$ 52,855.00	\$
														Revenu	ue Gain Com	pared to Existing	\$ 7,309.14	\$

))			
e Occupancy Annual	10 Month	0% Ny	Occupancy Annual
\$ -	\$ -	\$	-
\$ -	\$ -	\$	-
\$ 55,860.00	\$ 6,125.00	\$	73,500.00
\$ -	\$ -	\$	-
\$ -	\$ -	\$	-
\$ -	\$ -	\$	-
\$ -	\$ -	\$	-
\$ 204,979.20	\$ 21,100.80	\$	253,209.60
\$ 226,540.80	\$ 23,598.00	\$	283,176.00
\$ 146,880.00	\$ 12,920.00	\$	155,040.00
\$ -	\$ -	\$	-
\$ 634,260.00	\$ 63,743.80	\$	764,925.60
\$ 87,709.68	\$ 18,197.94	\$	218,375.28