

## MARINA REPLACEMENT RESERVE INFORMATION

### 1. LIFECYCLE EVALUATION

Reconstruction of our marina comes in two phases:

- Phase 1, "Decking Replacement". This occurs at T+25 years (or CY 2015).
- Phase 2, "All-inclusive Marina Demo & Replacement". This occurs at T+50 (or CY 2040).
- See notes 1, 2 and 3.

### 2. RULES OF THUMB FOR ESTIMATING TOTAL DOCK REPLACEMENT COST (FY2015 PRICING)

- Demolition and removal, \$7/sq. ft.
- Fixed pier replacement, \$25/ sq. ft.
- Floating dock replacement, \$40/ sq ft.
- Pump-out station, electrical wiring, new pedestals and plumbing. (\$25,000.)
- See note 4.

### 3. BENNETT'S CREEK LANDING MARINA SQUARE FOOTAGE ESTIMATES

- 4,280 sq. ft. (total)  
Calculation : 535' (dock length) x 8' wide = 4,280 sq. ft. (total)

### 4. ESTIMATE TO REMOVE AND DISPOSE OF THE MARINA

- \$30,000 (value in CY 2015)
- \$63,000 (value in 25 years (CY 2040) @ 3% inflation)  
Calculation: 4,280 sq. ft. (total) x \$7/ sq.ft. = \$30,000

### 5. ESTIMATE TO EXECUTE PHASE 1, "REPLACE DECKING"

- \$7,000 (value in CY 2015)
- \$9,400 (value in 10 years (CY 2040) @ 3% inflation)  
Calculation: \$7,062 for 2"x6"x8' marine grade WOOD decking (1,070 boards x \$6.60/ea)  
-or- \$16,050 for 1"x6"x8' ARTIFICIAL decking (1,070 boards x \$15.00/ea)  
Calculation:  
535' (dock length) x 8' wide = 4,280 sq. ft. (total).  
4,280 sq. ft. / 0.5 ft. (width of a 6" board) = 8,560 linear of decking using 2x6 lumber.  
8,560 / 8' = 1,070 each (2x6 boards)  
See notes 5, 6 and 7.

### 5. ESTIMATE TO EXECUTE PHASE 2, "ALL-INCLUSIVE MARINA DEMO & REPLACEMENT"

- \$162,000 (value in CY 2015)
- \$340,000 (value in 25 years (CY 2040) @ 3% inflation)  
Calculation: 4,280 sq. ft. (total) x \$7/ sq.ft. = \$30,000 (Removal & Disposal)  
Calculation: 4,280 sq. ft. (total) x \$25/sq.ft. = \$107,000 (Replacement for fixed Pier)  
Calculation: \$25,000. (Pump-out, electrical & new pedestals and plumbing)

### 6. SAVINGS PLAN FOR PHASE 1 "REPLACE DECKING" (\$8,000 GOAL)"

- \$128/month (5 years @ 3% interest) or \$7/month per slip
- \$60/month (10 years @ 3% interest) or \$3/month per slip

### 7. SAVINGS PLAN TO "REMOVE AND DISPOSE OF THE MARINA (\$63,000 GOAL)"

- \$146/month (25 years @ 3% interest) or \$8/month per slip
- \$112/month (30 years @ 3% interest) or \$6/month per slip
- \$88/month (35 years @ 3% interest) or \$4/month per slip

### 8. SAVINGS PLAN FOR PHASE 2 "ALL-INCLUSIVE MARINA DEMO & REPLACEMENT (\$340,000 GOAL)"

- \$790/month (25 years @ 3% interest) or \$43/month per slip
- \$606/month (30 years @ 3% interest) or \$31/month per slip
- \$476/month (35 years @ 3% interest) or \$25/month per slip
- \$381/month (40 years @ 3% interest) or \$20/month per slip

## MARINA REPLACEMENT RESERVE INFORMATION

### 9. ESTIMATED COST OF HAVING PURCHASED A \$12,000 SLIP

- \$20/month over 50 years
- \$40/month over 25 years
- Estimated commercial slips rent for \$125 - \$250 / month (CY 2015)

### 10. ESTIMATED AVG COST TO PURCHASE A SLIP

- \$12,000 (current value)
- \$25,000 (value in 25 years (CY 2040) @ 3% inflation)

#### NOTES:

- (1) Our marina was constructed around the year 1990, so T = 1990.
- (2) These are estimated dates for financial planning purposes only. Actual conditions will dictate when we begin replacement work.
- (3) Suggest we implement an annual maintenance plan that requires we (slip owners) formally inspect and document the condition of our dock at least once a year, during clean-up day. This will enable us to better gauge when replacement should begin.
- (4) Info provided by Princess Anne Pile and Lumber Company and Flint Marine Construction.
- (5) No labor or material cost (e.g., screws) are included.
- (6) Estimate is for marine grade wood deck boards, #1 Ground contact, 2x6x8', \$6.60/each. This lumber is NOT found at LOWES.
- (7) Artificial decking typically has a 25-year limited warranty against rot, termites or insect damage. Although it has a vastly superior life span compared to the salt-treated lumber found at Lowes, it is not superior to marine grade decking. In fact, artificial decking and marine grade decking are nearly equivalent in life span, both about 25 years. Another issue is artificial decking is only 1" thick and requires joist spaced at ~16" on-center (OC). I believe the joist spacing at our marina is almost 48" OC. This means we must use 2x6 marine grade lumber.

#### Sources Info:

- Inflation Rates: <http://www.usinflationcalculator.com/inflation/current-inflation-rates/>
- Inflation Calculator: <http://www.buyupside.com/calculators/inflationjan08.htm>
- Saving Calculator: <http://www.bankrate.com/calculators/savings/saving-goals-calculator.aspx>