

Town of Fairfield Golf Commission



H. Smith Richardson Golf Course 10 Year Master Improvement and Financial Plan 2010 - 2019



Revised May 25, 2010



**H. Smith Richardson Golf Course
10 Year Master Improvement & Financial Plan
2010 - 2019**

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Introduction

The following is a 10 year master improvement and financial plan for the H. Smith Richardson Golf Course in Fairfield, CT. The intent of this plan is to lay out the steps necessary to preserve golf course revenues, continue a track record of revenues exceeding operating expenses, and return the golf course to a benchmark standard of play. The plan is meant to be fiscally responsible and prudent in its prioritization. The expenses to be incurred with this plan are not intended to be part of the annual budget planning process but are meant to be incremental to the regular operations and maintenance of the H. Smith Richardson golf course.

This plan calls for a \$1.0MM reinvestment in the golf course infrastructure. The plan spreads the necessary projects over the ten year period, prioritizing improvements and targeting an expenditure level of roughly \$100K each year. This plan also includes a \$3.3MM renovation of the clubhouse in FY 2012-2013 and a \$150K restroom facility for the back nine in FY 2019-2020.

H. Smith Richardson is currently in good condition. The Superintendent and his staff have done a good job maintaining the course and the Superintendent has managed his staff, prioritizing regular maintenance and special projects to keep the course in above average condition. The Superintendent has also shown that the course can, on occasion, be brought up to better condition levels to meet higher standards for special events and outside tournaments. These better condition levels are not maintained on a regular basis due to limited resources and a very high level of traffic or number of rounds.

As a result of the consistent high level of traffic over many years, and priorities made with regard to regular maintenance due to limited resources, certain areas of the course are in need of renovation and restoration. If these renovations are not made, H. Smith Richardson is in jeopardy of seeing a significant decrease in traffic and a significant decrease in revenues.

Historically, the golf course has generated more revenues than operational expenditures -- effectively, self-funding its operations and providing a contribution to the town's general fund. Without making the much needed improvements, it is not expected that H. Smith Richardson will be able to generate enough revenues to cover its regular operating expenses starting in FY 2013 - 2014 and beyond. However, with the improvements, this plan projects an increase in the number of rounds and a corresponding increase in revenues. It is expected that the additional revenues generated would allow the golf course revenues to exceed its operating expenses and ultimately the additional revenues expected from implementing this plan will more than offset the total reinvestment of \$4.45MM in just over ten years.

H. Smith Richardson has the potential to be one of the top five municipal golf courses in Connecticut. It has good architecture. With a strategic and coordinated plan, the golf course can be returned to its potential with fiscal responsibility. The town of Fairfield can offer its residents a top-tier golf experience and can warrant premium rates from non-residents.



Current State of the Course

Greens:

Given the high level of traffic and number of rounds played per year, the greens at H. Smith Richardson are above average. None of the greens are in need of a major renovation, however, two of the greens would benefit from an expansion and/or re-grading. Only two of the eighteen greens are sand-based so a regular program of aeration and top-dressing should be followed. It is important that the Superintendent have the necessary materials and resources to maintain the greens throughout each year. The greens should be the highest priority for the Superintendent as EVERY golfer experiences the greens during every round. Poorly maintained greens are the quickest way for a course to start to see a drop in rounds and subsequent revenue.

During 2009, the Superintendent has been using a critical piece of equipment for green maintenance that is well beyond its useful life and in desperate need of replacement. As part of the 2010 budget, the Superintendent has requested a replacement green roller which must be approved in order to maintain the greens in 2010 and beyond.

Drainage:

In recent years, H. Smith Richardson has undertaken several drainage projects on hole #'s 4, 5, 6, 7, & 11. To date, the town of Fairfield has spent roughly \$230,000 on these drainage projects and they have significantly improved the condition and playability of the course. However, several areas of the course continue to need drainage work – specifically, hole #'s 1, 8, 10, 15, & 18. The estimated cost for the remaining drainage projects is \$180,000.

The importance of completing these drainage projects in 2010 is paramount – not only to improve the condition and playability of these holes, but to stem the tide of lost revenue both in lost greens fees and lost golf cart rental fees. Because of the poor drainage on these holes, the Superintendent and/or Golf Professional have been limiting golf cart usage to cart paths only. If carts are restricted to remain on the cart paths, in many instances, golfers will forego renting a cart or will forego playing altogether. It is estimated that greens fees and golf cart rentals were down \$67,500 in 2009 ⁽¹⁾ due to the incomplete drainage projects. Once the drainage projects are completed, the Superintendent and/or the Golf Pro will be able to permit golf carts to leave the cart paths sooner following inclement weather and lost greens fees and/or golf cart fees will be recovered.

Bunkers:

The golf course bunkers are in very poor condition and are in need of renovation. The majority of the bunkers do not drain properly, hold stormwater for days following rain, are lacking sufficient sand, and are misshapen from years of wear and tear along with improper maintenance.

(1) Assumption: 50 incremental days of cart path only restrictions, with 30 lost cart rentals per day and another 15 rounds lost per day. $(50 \times 30 \times 30 = 45,000) + (50 \times 15 \times 30 = 22,500) = \$67,500$.
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In many cases, the improper maintenance has been the result of limited resources and materials available to the Superintendent.

There are currently approximately 44 bunkers on the golf course. Several bunkers have been rebuilt in recent years. Several more are in satisfactory condition and don't require renovation. It is estimated that roughly 20 bunkers are in immediate need of renovation. This plan calls for sand bunkers to be refurbished both by in-house staff and by hiring outside contractors. The Superintendent has determined how many of these bunkers can be refurbished in-house and how many others may require an outside contractor. It is estimated that each bunker will cost roughly \$8,000 if the work is done by an outside contractor. For those bunkers addressed in house, the estimate is 40 man-hours plus materials at a cost of roughly \$5,000. This plan calls for several bunkers to be renovated each year over the course of seven years. It is not the intention or expectation to renovate all of the bunkers at one time.

Cart Paths:

H. Smith Richardson has roughly 5.5 miles of cart paths covering the golf course. Over time, sections of the cart paths have been replaced on an as-needed basis. It is expected that certain sections of cart path will continue to require replacement each year but this is planned for annually and is not part of this plan.

Tee Boxes:

Every golf course's second priority (behind the condition of the greens) should be the condition of the tee boxes. Several tee boxes have been rebuilt in recent years but several others need to be refurbished and/or enlarged. The USGA suggests that tee boxes should be at least 100 square feet for every 1,000 rounds and twice that for tees where irons are used. At H. Smith Richardson, with 40,000 to 45,000 rounds per year, several of our tee boxes are too small.

Ponds:

There are only three ponds on the H. Smith Richardson golf course. Each is relatively small, but each has filled with sediment and vegetation growth. The vegetation should be cleared and sediment dredged in accordance with all environmental regulations.

Maintenance Equipment and Bio-Rack Filtration System:

A good portion of the maintenance equipment that is used to maintain the golf course by the Superintendent and his staff is approaching the end of, or is already beyond, its useful life. As part of the annual operating budget process, the superintendent requests to replace equipment on an as-needed basis. It is not part of this plan to replace equipment on a formulaic basis but to rely on the Superintendent to prudently identify equipment in need of replacement each year. Any requests for replacement equipment should be viewed as a necessity to maintain the golf course to a threshold condition of quality. Therefore, any denials for replacement equipment could jeopardize future golf course conditions and potential revenues.



H. Smith Richardson also has a need for a Bio-Rack filtration and drainage system. A Bio-Rack system is used to filter and clean waste water run-off during the equipment clean-up process. Currently, the golf course does not have any filtration or drainage system. Chemicals and concentrated organic materials are simply hosed off in a cleared area adjacent to the 11th tee. The runoff enters the ground and area water table. H. Smith Richardson has requested the funding for a Bio-Rack system for several years and each request has been denied. To be responsible and good stewards of our environment, this plan includes another request to fund a Bio-Rack system.

Clubhouse / Cart Barn / Restroom Facility:

The H. Smith Richardson clubhouse is original to the golf course and has had no meaningful renovations since being built in 1972. Its rundown condition, limited functionality and dated appearance diminish the golfing experience. A renovated clubhouse would make the facility more appealing to a greater portion of Fairfield's residents to utilize and could generate additional revenue for the town.

Several renovation alternatives had been considered in 2009 but all alternatives were put on hold given the current economic challenges. This plan contemplates a \$3.3MM clubhouse renovation in FY 2012 - 2013.

This plan does not reflect the potential increase in revenues for the town of Fairfield from the operating concessionaire, nor does it reflect the increased utilization of the facilities by Fairfield's residents. It is expected that any renovation to the clubhouse and grounds will be reviewed in detail as the project approaches and it may be determined that a smaller or larger clubhouse renovation is warranted. It is not the intention of this plan to limit any options considered for a clubhouse renovation in the future.

Included in FY 2019 - 2020 is \$150K to build a permanent restroom facility for the back nine of the golf course. Currently, there is no restroom facility on the back nine. While the front nine surrounds the clubhouse, the back nine is removed from the main facility. To offer some services, the course has one port-o-let on the back nine but the sanitary conditions are often less than ideal. The estimated cost for the restroom includes a septic system as sewer is not available.

Parking Lot / Driveway:

Any changes to the parking lot or driveway would be contemplated in conjunction with the clubhouse renovation in FY 2012-2013. Traffic flow would be redesigned and additional parking would be added to accommodate the new clubhouse and expected increase in facility demand.

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10 Year Master Improvement & Financial Plan

| Summary of Improvements by Project | | |
|------------------------------------|----|------------------|
| Greens | \$ | 150,000 |
| Drainage | | 180,000 |
| Bunkers | | 250,000 |
| Tee Boxes | | 170,000 |
| Ponds | | 150,000 |
| Equipment & Bio-Rack | | 100,000 |
| Improvement Expenditures | | 1,000,000 |
| Clubhouse Expenditures | | 3,450,000 |
| Total | \$ | <u>4,450,000</u> |

| Summary of Improvements by Fiscal Year | | | |
|--|---------------------|---------------------|---------------------|
| | Improvements | Clubhouse | Total |
| FY 2010 - '11 | \$ 180,000 | | \$ 180,000 |
| FY 2011 - '12 | 98,000 | | 98,000 |
| FY 2012 - '13 | 105,000 | 3,300,000 | 3,405,000 |
| FY 2013 - '14 | 101,000 | | 101,000 |
| FY 2014 - '15 | 100,000 | | 100,000 |
| FY 2015 - '16 | 101,000 | | 101,000 |
| FY 2016 - '17 | 100,000 | | 100,000 |
| FY 2017 - '18 | 90,000 | | 90,000 |
| FY 2018 - '19 | 50,000 | | 50,000 |
| FY 2019 - '20 | 75,000 | 150,000 | 225,000 |
| Total | <u>\$ 1,000,000</u> | <u>\$ 3,450,000</u> | <u>\$ 4,450,000</u> |

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10 Year Master Improvement & Financial Plan

Improvements by Project

| | FY 2010 - '11 | FY 2011 - '12 | FY 2012 - '13 | FY 2013 - '14 | FY 2014 - '15 | FY 2015 - '16 | FY 2016 - '17 | FY 2017 - '18 | FY 2018 - '19 | FY 2019 - '20 | Total |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------|
| Greens | | | | | | | | | | | |
| Hole # 16 Expand | | | | | | 75,000 | | | | | 75,000 |
| Hole # 13 Regrade | | | | | | | | | | 75,000 | 75,000 |
| Subtotal | - | - | - | - | - | 75,000 | - | - | - | 75,000 | 150,000 |

Drainage

| | | | | | | | | | | | |
|----------------------------|---------|---|---|---|---|---|---|---|---|---|---------|
| Hole #'s 1, 8, 10, 15 & 18 | 180,000 | | | | | | | | | | 180,000 |
| Subtotal | 180,000 | - | - | - | - | - | - | - | - | - | 180,000 |

Bunkers

| | In-Hse | Contract | | | | | | | | | |
|-----------|--------|----------|--------|--------|--------|--------|--------|--------|---|--------|---------|
| Hole # 1 | 2 | 0 | | | 10,000 | | | | | | 10,000 |
| Hole # 2 | 2 | 0 | | | 10,000 | | | | | | 10,000 |
| Hole # 3 | 0 | 3 | 24,000 | | | | | | | | 24,000 |
| Hole # 5 | 1 | 0 | | | 5,000 | | | | | | 5,000 |
| Hole # 6 | 3 | 0 | | | 15,000 | | | | | | 15,000 |
| Hole # 7 | 1 | 0 | | | | | | 5,000 | | | 5,000 |
| Hole # 9 | 1 | 3 | | 29,000 | | | | | | | 29,000 |
| Hole # 10 | 2 | 0 | | | | | | 10,000 | | | 10,000 |
| Hole # 11 | 0 | 3 | 24,000 | | | | | | | | 24,000 |
| Hole # 12 | 2 | 0 | | | 10,000 | | | | | | 10,000 |
| Hole # 13 | 0 | 5 | | | 40,000 | | | | | | 40,000 |
| Hole # 14 | 2 | 0 | | | | 10,000 | | | | | 10,000 |
| Hole # 15 | 1 | 2 | | 21,000 | | | | | | | 21,000 |
| Hole # 16 | 0 | 2 | | | | 16,000 | | | | | 16,000 |
| Hole # 17 | 0 | 2 | | | 16,000 | | | | | | 16,000 |
| Hole # 18 | 1 | 0 | | | 5,000 | | | | | | 5,000 |
| Subtotal | 18 | 20 | - | 48,000 | 50,000 | 71,000 | 40,000 | 26,000 | - | 15,000 | 250,000 |

Tee Boxes

| | | | | | | | | | | | |
|-----------------------|---|---|--------|--------|--------|---|--------|--------|---|---|---------|
| Hole # 3 Expand | | | | | | | 25,000 | | | | 25,000 |
| Hole # 8 Expand | | | 30,000 | | | | | | | | 30,000 |
| Hole # 9 Tier | | | 25,000 | | | | | | | | 25,000 |
| Hole # 10 Move | | | | | 30,000 | | | | | | 30,000 |
| Hole # 12 Expand/Tier | | | | 30,000 | | | | | | | 30,000 |
| Hole # 13 Expand/Tier | | | | | 30,000 | | | | | | 30,000 |
| Subtotal | - | - | 55,000 | 30,000 | 60,000 | - | - | 25,000 | - | - | 170,000 |

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Improvements by Project

| | FY 2010 - '11 | FY 2011 - '12 | FY 2012 - '13 | FY 2013 - '14 | FY 2014 - '15 | FY 2015 - '16 | FY 2016 - '17 | FY 2017 - '18 | FY 2018 - '19 | FY 2019 - '20 | Total |
|---------------------------------|----------------|---------------|------------------|----------------|----------------|----------------|----------------|---------------|---------------|----------------|------------------|
| Ponds | | | | | | | | | | | |
| Hole # 3 | | | | | | | | 50,000 | | | 50,000 |
| Hole # 8 | | | | | | | | | 50,000 | | 50,000 |
| Hole #'s 10 & 18 | | 50,000 | | | | | | | | | 50,000 |
| Subtotal | - | 50,000 | - | - | - | - | - | 50,000 | 50,000 | - | 150,000 |
| Equipment & Bio-Rack | | | | | | | | | | | |
| Bio-Rack Filtration System | | | | | | | 100,000 | | | | 100,000 |
| Subtotal | - | - | - | - | - | - | 100,000 | - | - | - | 100,000 |
| Clubhouse / Cart Barn | | | | | | | | | | | |
| Clubhouse | | | 2,250,000 | | | | | | | | 2,250,000 |
| Cart Barn | | | 350,000 | | | | | | | | 350,000 |
| Parking and Site | | | 700,000 | | | | | | | | 700,000 |
| Restroom Facility - Back Nine | | | | | | | | | | 150,000 | 150,000 |
| Subtotal | - | - | 3,300,000 | - | - | - | - | - | - | 150,000 | 3,450,000 |
| Improvement Expenditures | 180,000 | 98,000 | 105,000 | 101,000 | 100,000 | 101,000 | 100,000 | 90,000 | 50,000 | 75,000 | 1,000,000 |
| Clubhouse Expenditures | - | - | 3,300,000 | - | - | - | - | - | - | 150,000 | 3,450,000 |
| Total | <u>180,000</u> | <u>98,000</u> | <u>3,405,000</u> | <u>101,000</u> | <u>100,000</u> | <u>101,000</u> | <u>100,000</u> | <u>90,000</u> | <u>50,000</u> | <u>225,000</u> | <u>4,450,000</u> |

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H. Smith Richardson Golf Course 10 Year Master Improvement & Financial Plan

Financial History

| | Actual FY 2006 - '07 | Actual FY 2007 - '08 | Actual FY 2008 - '09 | Estimate FY 2009 - '10 |
|------------------------------|-------------------------|-------------------------|-------------------------|---------------------------|
| Operations | | | | |
| Number of Rounds | | | | |
| Resident | 29,372 | 28,515 | 30,282 | |
| Non-Resident | 16,329 | 14,161 | 14,649 | |
| Total | 45,701 | 42,676 | 44,931 | 41,000 |
| Resident ID's | | | | |
| Adults | 2,817 | 2,755 | 3,203 | |
| Seniors | 658 | 694 | 777 | |
| Juniors | 651 | 691 | 789 | |
| Total | 4,126 | 4,140 | 4,769 | 4,750 |
| Season Passes | | | | |
| Adult - Resident | 96 | 101 | 97 | |
| Senior - Resident | 52 | 43 | 43 | |
| Adult - Non-Resident | 19 | 17 | 20 | |
| Senior - Non-Resident | 11 | 13 | 12 | |
| Total | 178 | 174 | 172 | 175 |
| Revenues | | | | |
| Greens Fees | 933,959 | 956,199 | 1,035,009 | 1,090,508 |
| Season Passes | 60,280 | 57,927 | 59,225 | 58,000 |
| Resident ID's | 101,882 | 102,627 | 117,725 | 103,500 |
| Locker Rentals | 3,600 | 3,200 | 2,250 | 3,500 |
| Cart Fees | 237,710 | 237,578 | 257,681 | 290,000 |
| Driving Range | 139,731 | 144,270 | 122,475 | 130,000 |
| Total | <u>1,477,162</u> | <u>1,501,801</u> | <u>1,594,365</u> | <u>1,675,508</u> |
| Operating Expenses | | | | |
| Budget | 1,381,389 | 1,455,028 | 1,498,888 | 1,453,712 |
| Actual/Estimate | <u>1,283,290</u> | <u>1,440,858</u> | <u>1,490,000</u> | <u>1,450,000</u> |
| Expense Surplus/(Deficit) | 98,099 | 14,170 | 8,888 | 3,712 |
| Net Direct | | | | |
| Contribution / (Consumption) | <u>193,872</u> | <u>60,943</u> | <u>104,365</u> | <u>225,508</u> |

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10 Year Master Improvement & Financial Plan

Base Case Projections **with** Improvements

| Number of Rounds | <u>FY 2010 - '11</u> | <u>FY 2011 - '12</u> | <u>FY 2012 - '13</u> | <u>FY 2013 - '14</u> | <u>FY 2014 - '15</u> | <u>FY 2015 - '16</u> | <u>FY 2016 - '17</u> | <u>FY 2017 - '18</u> | <u>FY 2018 - '19</u> | <u>FY 2019 - '20</u> |
|-------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Resident | 28,900 | 29,145 | 29,370 | 29,575 | 30,225 | 30,080 | 30,080 | 30,080 | 30,080 | 30,080 |
| Non-Resident | 13,600 | 14,355 | 15,130 | 15,925 | 16,275 | 16,920 | 16,920 | 16,920 | 16,920 | 16,920 |
| Total | 42,500 | 43,500 | 44,500 | 45,500 | 46,500 | 47,000 | 47,000 | 47,000 | 47,000 | 47,000 |
| Revenues | | | | | | | | | | |
| Greens Fees | 1,070,660 | 1,103,726 | 1,137,153 | 1,247,155 | 1,274,565 | 1,296,824 | 1,296,824 | 1,296,824 | 1,296,824 | 1,296,824 |
| Season Passes | 157,000 | 157,000 | 157,000 | 216,250 | 216,250 | 216,250 | 216,250 | 216,250 | 216,250 | 216,250 |
| Resident ID's | 61,825 | 61,825 | 61,825 | 67,750 | 67,750 | 67,750 | 67,750 | 67,750 | 67,750 | 67,750 |
| Locker Rentals | 2,500 | 2,500 | 2,500 | - | - | - | - | - | - | - |
| Cart Fees | 275,000 | 290,000 | 292,500 | 300,000 | 302,500 | 305,000 | 307,500 | 310,000 | 312,500 | 315,000 |
| Driving Range | 130,000 | 140,000 | 142,500 | 145,000 | 147,500 | 150,000 | 152,500 | 155,000 | 157,500 | 160,000 |
| Total | 1,696,985 | 1,755,051 | 1,793,478 | 1,976,155 | 2,008,565 | 2,035,824 | 2,040,824 | 2,045,824 | 2,050,824 | 2,055,824 |
| Operating Expenses | | | | | | | | | | |
| Budget | <u>1,450,000</u> | <u>1,493,500</u> | <u>1,538,305</u> | <u>1,584,454</u> | <u>1,631,988</u> | <u>1,680,947</u> | <u>1,731,376</u> | <u>1,783,317</u> | <u>1,836,817</u> | <u>1,891,921</u> |
| Total | 1,450,000 | 1,493,500 | 1,538,305 | 1,584,454 | 1,631,988 | 1,680,947 | 1,731,376 | 1,783,317 | 1,836,817 | 1,891,921 |
| Net Direct | | | | | | | | | | |
| Contribution / (Consumption) | <u>246,985</u> | <u>261,551</u> | <u>255,173</u> | <u>391,701</u> | <u>376,577</u> | <u>354,877</u> | <u>309,448</u> | <u>262,507</u> | <u>214,007</u> | <u>163,903</u> |
| Cumulative Surplus | 246,985 | 508,536 | 763,709 | 1,155,409 | 1,531,987 | 1,886,863 | 2,196,311 | 2,458,818 | 2,672,826 | 2,836,728 |
| Cumulative Revenue | 1,696,985 | 3,452,036 | 5,245,514 | 7,221,669 | 9,230,234 | 11,266,058 | 13,306,882 | 15,352,706 | 17,403,530 | 19,459,354 |

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Downside Case Projections **without** Improvements

Number of Rounds

| | FY 2010 - '11 | FY 2011 - '12 | FY 2012 - '13 | FY 2013 - '14 | FY 2014 - '15 | FY 2015 - '16 | FY 2016 - '17 | FY 2017 - '18 | FY 2018 - '19 | FY 2019 - '20 |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Resident | 27,540 | 27,370 | 27,600 | 27,428 | 27,650 | 27,475 | 27,690 | 27,513 | 27,720 | 27,540 |
| Non-Resident | 12,960 | 12,880 | 12,400 | 12,323 | 11,850 | 11,775 | 11,310 | 11,238 | 10,780 | 10,710 |
| Total | 40,500 | 40,250 | 40,000 | 39,750 | 39,500 | 39,250 | 39,000 | 38,750 | 38,500 | 38,250 |

Revenues

| | | | | | | | | | | |
|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Greens Fees | 1,020,276 | 1,013,978 | 1,000,440 | 994,187 | 980,785 | 974,578 | 961,311 | 955,149 | 942,018 | 935,901 |
| Season Passes | 157,000 | 157,000 | 157,000 | 157,000 | 157,000 | 157,000 | 157,000 | 157,000 | 157,000 | 157,000 |
| Resident ID's | 61,825 | 61,825 | 61,825 | 61,825 | 61,825 | 61,825 | 61,825 | 61,825 | 61,825 | 61,825 |
| Locker Rentals | 2,500 | 2,250 | 2,000 | 1,750 | 1,500 | 1,250 | 1,000 | 750 | 500 | 250 |
| Cart Fees | 250,000 | 235,000 | 230,000 | 230,000 | 230,000 | 230,000 | 230,000 | 230,000 | 230,000 | 230,000 |
| Driving Range | 120,000 | 115,000 | 110,000 | 110,000 | 110,000 | 110,000 | 110,000 | 110,000 | 110,000 | 110,000 |
| Total | 1,611,601 | 1,585,053 | 1,561,265 | 1,554,762 | 1,541,110 | 1,534,653 | 1,521,136 | 1,514,724 | 1,501,343 | 1,494,976 |

Operating Expenses

| | | | | | | | | | | |
|--------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Budget | <u>1,450,000</u> | <u>1,493,500</u> | <u>1,538,305</u> | <u>1,584,454</u> | <u>1,631,988</u> | <u>1,680,947</u> | <u>1,731,376</u> | <u>1,783,317</u> | <u>1,836,817</u> | <u>1,891,921</u> |
| Total | 1,450,000 | 1,493,500 | 1,538,305 | 1,584,454 | 1,631,988 | 1,680,947 | 1,731,376 | 1,783,317 | 1,836,817 | 1,891,921 |

Net Direct

| | | | | | | | | | | |
|--------------------------------|---------|---------|---------|----------|----------|-----------|-----------|-----------|-----------|-------------|
| Contribution / (Consumption) | 161,601 | 91,553 | 22,960 | (29,692) | (90,878) | (146,295) | (210,240) | (268,593) | (335,474) | (396,945) |
| Cumulative Surplus / (Deficit) | 161,601 | 253,154 | 276,114 | 246,422 | 155,544 | 9,249 | (200,990) | (469,584) | (805,057) | (1,202,003) |

| | | | | | | | | | | |
|---------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Cumulative Revenue | 1,611,601 | 3,196,654 | 4,757,919 | 6,312,681 | 7,853,791 | 9,388,444 | 10,909,580 | 12,424,304 | 13,925,647 | 15,420,623 |
|---------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|

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10 Year Master Improvement & Financial Plan

Variance between Cases

Number of Rounds

| | FY 2010 - '11 | FY 2011 - '12 | FY 2012 - '13 | FY 2013 - '14 | FY 2014 - '15 | FY 2015 - '16 | FY 2016 - '17 | FY 2017 - '18 | FY 2018 - '19 | FY 2019 - '20 |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Resident | 1,360 | 1,775 | 1,770 | 2,148 | 2,575 | 2,605 | 2,390 | 2,568 | 2,360 | 2,540 |
| Non-Resident | 640 | 1,475 | 2,730 | 3,603 | 4,425 | 5,145 | 5,610 | 5,683 | 6,140 | 6,210 |
| Total | 2,000 | 3,250 | 4,500 | 5,750 | 7,000 | 7,750 | 8,000 | 8,250 | 8,500 | 8,750 |

Revenues

| | | | | | | | | | | |
|----------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Greens Fees | 50,384 | 89,748 | 136,713 | 252,968 | 293,780 | 322,247 | 335,513 | 341,675 | 354,806 | 360,923 |
| Season Passes | - | - | - | 59,250 | 59,250 | 59,250 | 59,250 | 59,250 | 59,250 | 59,250 |
| Resident ID's | - | - | - | 5,925 | 5,925 | 5,925 | 5,925 | 5,925 | 5,925 | 5,925 |
| Locker Rentals | - | 250 | 500 | (1,750) | (1,500) | (1,250) | (1,000) | (750) | (500) | (250) |
| Cart Fees | 25,000 | 55,000 | 62,500 | 70,000 | 72,500 | 75,000 | 77,500 | 80,000 | 82,500 | 85,000 |
| Driving Range | 10,000 | 25,000 | 32,500 | 35,000 | 37,500 | 40,000 | 42,500 | 45,000 | 47,500 | 50,000 |
| Total | 85,384 | 169,998 | 232,213 | 421,393 | 467,455 | 501,172 | 519,688 | 531,100 | 549,481 | 560,848 |

Operating Expenses

| | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|
| Budget | - | - | - | - | - | - | - | - | - | - |
| Total | - | - | - | - | - | - | - | - | - | - |

Net Direct

| | | | | | | | | | | |
|------------------------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Contribution / (Consumption) | 85,384 | 169,998 | 232,213 | 421,393 | 467,455 | 501,172 | 519,688 | 531,100 | 549,481 | 560,848 |
|------------------------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|

| | | | | | | | | | | |
|--------------------|--------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| Cumulative Surplus | 85,384 | 255,382 | 487,595 | 908,987 | 1,376,442 | 1,877,614 | 2,397,302 | 2,928,402 | 3,477,883 | 4,038,731 |
|--------------------|--------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|

| | | | | | | | | | | |
|--------------------|--------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|------------------|
| Cumulative Revenue | 85,384 | 255,382 | 487,595 | 908,987 | 1,376,442 | 1,877,614 | 2,397,302 | 2,928,402 | 3,477,883 | 4,038,731 |
|--------------------|--------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|------------------|



Conclusion

H. Smith Richardson is a top-tier municipal golf course and has the potential to be one of the top five municipal golf courses in the state of Connecticut. The course has been recording over 40,000 rounds per year for many years – well beyond the expected level of play when first built. The result of the high number of rounds and limited resources has been a slow degradation of both the course and facilities. While rounds are still above 40,000, they have been on the decline. H. Smith Richardson faces a pivotal juncture. Decisions made with respect to funding or cost controls could jeopardize the future revenues generated by the golf course.

Specifically, if reinvestments are not made into the golf course and facilities, revenues are projected to decrease significantly. Further, revenues are projected to no longer cover direct operating expenses. By 2013 – 2014 and beyond, the golf course may no longer deliver a surplus to the town of Fairfield but instead will likely run at a deficit.

This plan calls for a \$1.0MM reinvestment in the golf course over a ten year period. The plan spreads the necessary projects over the ten year period, targeting an expenditure level of roughly \$100K per year. This plan also includes a \$3.3MM renovation of the clubhouse in FY 2012-2013 and \$150K for a permanent restroom facility on the back nine in FY 2019 - 2020.

It is important to note that with this \$4.45M reinvestment, revenues are projected to rise by roughly \$4.6MM over the alternative revenues that would result with no reinvestment. Effectively, it is expected that the incremental expenditures called for in this plan will pay for themselves in just over ten years.

Town of Fairfield Golf Commission



H. Smith Richardson Golf Course

Appendix:

Base Case Assumptions

| 2010 - 2011 | | | | 2011 - 2012 | | | | 2012 - 2013 | | | | 2013 - 2014 | | | | 2014 - 2015 | | | | | | | | | |
|------------------------------------|---------|----------|---------|-------------|---------|---------|---------|-------------|---------|---------|---------|-------------|---------|----------|---------|-------------|---------|---------|---------|-----------|---------|---------|--------|--|--|
| | | Resident | Non-Res | Total | % | | | Resident | Non-Res | Total | % | | | Resident | Non-Res | Total | % | | | Resident | Non-Res | Total | % | | |
| HSR Number of Rounds | | | | | | | | | | | | | | | | | | | | | | | | | |
| Resident/Non-Resident Mix | | 68% | 32% | | | | | 67% | 33% | | | | | 66% | 34% | | | | | 65% | 35% | | | | |
| Weekend | 18-Hole | A/S/J | 7,225 | 3,400 | 10,625 | 25% | 7,286 | 3,589 | 10,875 | 25% | 7,343 | 3,783 | 11,125 | 25% | 7,394 | 3,981 | 11,375 | 25% | 7,556 | 4,069 | 11,625 | 25% | | | |
| Weekday | 18-Hole | Adult | 6,358 | 2,992 | 9,350 | 22% | 6,412 | 3,158 | 9,570 | 22% | 6,461 | 3,329 | 9,790 | 22% | 6,507 | 3,504 | 10,010 | 22% | 6,650 | 3,581 | 10,230 | 22% | | | |
| Weekday | 18-Hole | Senior | 3,179 | 1,496 | 4,675 | 11% | 3,206 | 1,579 | 4,785 | 11% | 3,231 | 1,664 | 4,895 | 11% | 3,253 | 1,752 | 5,005 | 11% | 3,325 | 1,790 | 5,115 | 11% | | | |
| Weekday | 18-Hole | Junior | 1,734 | 816 | 2,550 | 6% | 1,749 | 861 | 2,610 | 6% | 1,762 | 908 | 2,670 | 6% | 1,775 | 956 | 2,730 | 6% | 1,814 | 977 | 2,790 | 6% | | | |
| Weekend | 9-Hole | A/S/J | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| Weekday | 9-Hole | Adult | 5,202 | 2,448 | 7,650 | 18% | 5,246 | 2,584 | 7,830 | 18% | 5,287 | 2,723 | 8,010 | 18% | 5,324 | 2,867 | 8,190 | 18% | 5,441 | 2,930 | 8,370 | 18% | | | |
| Weekday | 9-Hole | Senior | 2,890 | 1,360 | 4,250 | 10% | 2,915 | 1,436 | 4,350 | 10% | 2,937 | 1,513 | 4,450 | 10% | 2,958 | 1,593 | 4,550 | 10% | 3,023 | 1,628 | 4,650 | 10% | | | |
| Weekday | 9-Hole | Junior | 1,445 | 680 | 2,125 | 5% | 1,457 | 718 | 2,175 | 5% | 1,469 | 757 | 2,225 | 5% | 1,479 | 796 | 2,275 | 5% | 1,511 | 814 | 2,325 | 5% | | | |
| Weekday | 9-Hole | Junior | 867 | 408 | 1,275 | 3% | 874 | 431 | 1,305 | 3% | 881 | 454 | 1,335 | 3% | 887 | 478 | 1,365 | 3% | 907 | 488 | 1,395 | 3% | | | |
| Total | | 28,900 | 13,600 | 42,500 | 100% | 29,145 | 14,355 | 43,500 | 100% | 29,370 | 15,130 | 44,500 | 100% | 29,575 | 15,925 | 45,500 | 100% | 30,225 | 16,275 | 46,500 | 100% | | | | |
| HSR Number of ID's & Season Passes | | | | | | | | | | | | | | | | | | | | | | | | | |
| ID's | Adult | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | | |
| ID's | Senior | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | | |
| ID's | Junior | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | | |
| Total | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | | |
| Season Pass | Adult | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 120 | | | |
| Season Pass | Senior | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 55 | | | |
| HSR Rates | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weekend | 18-Hole | A/S/J | 28.00 | 54.00 | | 28.00 | 54.00 | | 28.00 | 54.00 | | 30.00 | 56.00 | | 30.00 | 56.00 | | 30.00 | 56.00 | | 30.00 | 56.00 | | | |
| Weekday | 18-Hole | Adult | 22.00 | 42.00 | | 22.00 | 42.00 | | 22.00 | 42.00 | | 24.00 | 45.00 | | 24.00 | 45.00 | | 24.00 | 45.00 | | 24.00 | 45.00 | | | |
| Weekday | 18-Hole | Senior | 16.00 | 32.00 | | 16.00 | 32.00 | | 16.00 | 32.00 | | 18.00 | 34.00 | | 18.00 | 34.00 | | 18.00 | 34.00 | | 18.00 | 34.00 | | | |
| Weekday | 18-Hole | Junior | 12.00 | 24.00 | | 12.00 | 24.00 | | 12.00 | 24.00 | | 14.00 | 24.00 | | 14.00 | 24.00 | | 14.00 | 24.00 | | 14.00 | 24.00 | | | |
| Weekend | 9-Hole | A/S/J | 15.00 | 28.00 | | 15.00 | 28.00 | | 15.00 | 28.00 | | 16.00 | 30.00 | | 16.00 | 30.00 | | 16.00 | 30.00 | | 16.00 | 30.00 | | | |
| Weekday | 9-Hole | Adult | 14.00 | 28.00 | | 14.00 | 28.00 | | 14.00 | 28.00 | | 15.00 | 28.00 | | 15.00 | 28.00 | | 15.00 | 28.00 | | 15.00 | 28.00 | | | |
| Weekday | 9-Hole | Senior | 13.00 | 26.00 | | 13.00 | 26.00 | | 13.00 | 26.00 | | 14.00 | 26.00 | | 14.00 | 26.00 | | 14.00 | 26.00 | | 14.00 | 26.00 | | | |
| Weekday | 9-Hole | Junior | 11.00 | 22.00 | | 11.00 | 22.00 | | 11.00 | 22.00 | | 12.00 | 22.00 | | 12.00 | 22.00 | | 12.00 | 22.00 | | 12.00 | 22.00 | | | |
| Resident ID's | Adult | 35.00 | - | | 35.00 | - | | 35.00 | - | | 50.00 | - | | 50.00 | - | | 50.00 | - | | 50.00 | - | | 50.00 | | |
| Resident ID's | Senior | 35.00 | - | | 35.00 | - | | 35.00 | - | | 50.00 | - | | 50.00 | - | | 50.00 | - | | 50.00 | - | | 50.00 | | |
| Resident ID's | Junior | 25.00 | - | | 25.00 | - | | 25.00 | - | | 25.00 | - | | 25.00 | - | | 25.00 | - | | 25.00 | - | | 25.00 | | |
| Season Pass | Adult | 360.00 | 700.00 | | 360.00 | 700.00 | | 360.00 | 700.00 | | 400.00 | 700.00 | | 400.00 | 750.00 | | 400.00 | 750.00 | | 400.00 | 750.00 | | 400.00 | | |
| Season Pass | Senior | 185.00 | 350.00 | | 185.00 | 350.00 | | 185.00 | 350.00 | | 200.00 | 350.00 | | 200.00 | 375.00 | | 200.00 | 375.00 | | 200.00 | 375.00 | | 200.00 | | |
| HSR Revenue | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weekend | 18-Hole | A/S/J | 202,300 | 183,600 | 385,900 | | 204,015 | 193,793 | 397,808 | | 205,590 | 204,255 | 409,845 | | 221,813 | 222,950 | 444,763 | | 226,688 | 227,850 | 454,538 | | | | |
| Weekday | 18-Hole | Adult | 139,876 | 125,664 | 265,540 | | 141,062 | 132,640 | 273,702 | | 142,151 | 139,801 | 281,952 | | 156,156 | 157,658 | 313,814 | | 159,588 | 161,123 | 320,711 | | | | |
| Weekday | 18-Hole | Senior | 50,864 | 47,872 | 98,736 | | 51,295 | 50,530 | 101,825 | | 51,691 | 53,258 | 104,949 | | 58,559 | 59,560 | 118,118 | | 59,846 | 60,869 | 120,714 | | | | |
| Weekday | 18-Hole | Junior | 20,808 | 19,584 | 40,392 | | 20,984 | 20,671 | 41,656 | | 21,146 | 21,787 | 42,934 | | 24,843 | 22,932 | 47,775 | | 25,389 | 23,436 | 48,825 | | | | |
| Weekend | 9-Hole | A/S/J | 78,030 | 68,544 | 146,574 | | 78,692 | 72,349 | 151,041 | | 79,299 | 76,255 | 155,554 | | 85,176 | 85,995 | 171,171 | | 87,048 | 87,885 | 174,933 | | | | |
| Weekday | 9-Hole | Adult | 40,460 | 38,080 | 78,540 | | 40,803 | 40,194 | 80,997 | | 41,118 | 42,364 | 83,482 | | 44,363 | 44,590 | 88,953 | | 45,338 | 45,570 | 90,908 | | | | |
| Weekday | 9-Hole | Senior | 18,785 | 17,680 | 36,465 | | 18,944 | 18,662 | 37,606 | | 19,091 | 19,669 | 38,760 | | 20,703 | 20,703 | 41,405 | | 21,158 | 21,158 | 42,315 | | | | |
| Weekday | 9-Hole | Junior | 9,537 | 8,976 | 18,513 | | 9,618 | 9,474 | 19,092 | | 9,692 | 9,986 | 19,678 | | 10,647 | 10,511 | 21,158 | | 10,881 | 10,742 | 21,623 | | | | |
| Revenue from Greens Fee: | | 560,660 | 510,000 | 1,070,660 | | 565,413 | 538,313 | 1,103,726 | | 569,778 | 567,375 | 1,137,153 | | 622,258 | 624,897 | 1,247,155 | | 635,934 | 638,631 | 1,274,565 | | | | | |
| Other Revenue | | | | | | | | | | | | | | | | | | | | | | | | | |
| Resident ID's | A/S/J | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | 216,250 | - | 216,250 | | 216,250 | - | 216,250 | | 216,250 | | | |
| Season Pass | A/S | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | 49,000 | 18,750 | 67,750 | | 49,000 | 18,750 | 67,750 | | 67,750 | | | |
| Locker Rentals | | - | - | 2,500 | | - | - | 2,500 | | - | - | 2,500 | | - | - | - | | - | - | - | | - | | | |
| Cart Fees | | - | - | 275,000 | | - | - | 290,000 | | - | - | 292,500 | | - | - | 300,000 | | - | - | - | | 302,500 | | | |
| Driving Range | | - | - | 130,000 | | - | - | 140,000 | | - | - | 142,500 | | - | - | 145,000 | | - | - | - | | 147,500 | | | |
| Other Revenue | | 201,325 | 17,500 | 626,325 | | 201,325 | 17,500 | 651,325 | | 201,325 | 17,500 | 656,325 | | 265,250 | 18,750 | 729,000 | | 265,250 | 18,750 | 734,000 | | | | | |
| Total Revenue | | 761,985 | 527,500 | 1,696,985 | | 766,738 | 555,813 | 1,755,051 | | 771,103 | 584,875 | 1,793,478 | | 887,508 | 643,647 | 1,976,155 | | 901,184 | 657,381 | 2,008,565 | | | | | |

Town of Fairfield Golf Commission



H. Smith Richardson C

Appendix:

Base Case Assumptions

| | | 2015 - 2016 | | | | 2016 - 2017 | | | | 2017 - 2018 | | | | 2018 - 2019 | | | | 2019 - 2020 | | | |
|---|----------------|-------------|---------|-----------|------|-------------|---------|-----------|------|-------------|---------|-----------|------|-------------|---------|-----------|------|-------------|---------|-----------|------|
| | | Resident | Non-Res | Total | % | Resident | Non-Res | Total | % | Resident | Non-Res | Total | % | Resident | Non-Res | Total | % | Resident | Non-Res | Total | % |
| HSR Number of Rounds | | | | | | | | | | | | | | | | | | | | | |
| Resident/Non-Resident Mix | | 64% | 36% | | | 64% | 36% | | | 64% | 36% | | | 64% | 36% | | | 64% | 36% | | |
| Weekend | 18-Hole A/S/J | 7,520 | 4,230 | 11,750 | 25% | 7,520 | 4,230 | 11,750 | 25% | 7,520 | 4,230 | 11,750 | 25% | 7,520 | 4,230 | 11,750 | 25% | 7,520 | 4,230 | 11,750 | 25% |
| Weekday | 18-Hole Adult | 6,618 | 3,722 | 10,340 | 22% | 6,618 | 3,722 | 10,340 | 22% | 6,618 | 3,722 | 10,340 | 22% | 6,618 | 3,722 | 10,340 | 22% | 6,618 | 3,722 | 10,340 | 22% |
| Weekday | 18-Hole Senior | 3,309 | 1,861 | 5,170 | 11% | 3,309 | 1,861 | 5,170 | 11% | 3,309 | 1,861 | 5,170 | 11% | 3,309 | 1,861 | 5,170 | 11% | 3,309 | 1,861 | 5,170 | 11% |
| Weekday | 18-Hole Junior | 1,805 | 1,015 | 2,820 | 6% | 1,805 | 1,015 | 2,820 | 6% | 1,805 | 1,015 | 2,820 | 6% | 1,805 | 1,015 | 2,820 | 6% | 1,805 | 1,015 | 2,820 | 6% |
| | | - | - | - | | - | - | - | | - | - | - | | - | - | - | | - | - | - | |
| Weekend | 9-Hole A/S/J | 5,414 | 3,046 | 8,460 | 18% | 5,414 | 3,046 | 8,460 | 18% | 5,414 | 3,046 | 8,460 | 18% | 5,414 | 3,046 | 8,460 | 18% | 5,414 | 3,046 | 8,460 | 18% |
| Weekday | 9-Hole Adult | 3,008 | 1,692 | 4,700 | 10% | 3,008 | 1,692 | 4,700 | 10% | 3,008 | 1,692 | 4,700 | 10% | 3,008 | 1,692 | 4,700 | 10% | 3,008 | 1,692 | 4,700 | 10% |
| Weekday | 9-Hole Senior | 1,504 | 846 | 2,350 | 5% | 1,504 | 846 | 2,350 | 5% | 1,504 | 846 | 2,350 | 5% | 1,504 | 846 | 2,350 | 5% | 1,504 | 846 | 2,350 | 5% |
| Weekday | 9-Hole Junior | 902 | 508 | 1,410 | 3% | 902 | 508 | 1,410 | 3% | 902 | 508 | 1,410 | 3% | 902 | 508 | 1,410 | 3% | 902 | 508 | 1,410 | 3% |
| Total | | 30,080 | 16,920 | 47,000 | 100% | 30,080 | 16,920 | 47,000 | 100% | 30,080 | 16,920 | 47,000 | 100% | 30,080 | 16,920 | 47,000 | 100% | 30,080 | 16,920 | 47,000 | 100% |
| HSR Number of ID's & Season Passes | | | | | | | | | | | | | | | | | | | | | |
| ID's | Adult | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | |
| ID's | Senior | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | |
| ID's | Junior | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | |
| Total | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | |
| Season Pass | Adult | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | |
| Season Pass | Senior | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | |
| HSR Rates | | | | | | | | | | | | | | | | | | | | | |
| Weekend | 18-Hole A/S/J | 30.00 | 56.00 | | | 30.00 | 56.00 | | | 30.00 | 56.00 | | | 30.00 | 56.00 | | | 30.00 | 56.00 | | |
| Weekday | 18-Hole Adult | 24.00 | 45.00 | | | 24.00 | 45.00 | | | 24.00 | 45.00 | | | 24.00 | 45.00 | | | 24.00 | 45.00 | | |
| Weekday | 18-Hole Senior | 18.00 | 34.00 | | | 18.00 | 34.00 | | | 18.00 | 34.00 | | | 18.00 | 34.00 | | | 18.00 | 34.00 | | |
| Weekday | 18-Hole Junior | 14.00 | 24.00 | | | 14.00 | 24.00 | | | 14.00 | 24.00 | | | 14.00 | 24.00 | | | 14.00 | 24.00 | | |
| Weekend | 9-Hole A/S/J | 16.00 | 30.00 | | | 16.00 | 30.00 | | | 16.00 | 30.00 | | | 16.00 | 30.00 | | | 16.00 | 30.00 | | |
| Weekday | 9-Hole Adult | 15.00 | 28.00 | | | 15.00 | 28.00 | | | 15.00 | 28.00 | | | 15.00 | 28.00 | | | 15.00 | 28.00 | | |
| Weekday | 9-Hole Senior | 14.00 | 26.00 | | | 14.00 | 26.00 | | | 14.00 | 26.00 | | | 14.00 | 26.00 | | | 14.00 | 26.00 | | |
| Weekday | 9-Hole Junior | 12.00 | 22.00 | | | 12.00 | 22.00 | | | 12.00 | 22.00 | | | 12.00 | 22.00 | | | 12.00 | 22.00 | | |
| Resident ID's | Adult | 50.00 | - | | | 50.00 | - | | | 50.00 | - | | | 50.00 | - | | | 50.00 | - | | |
| Resident ID's | Senior | 50.00 | - | | | 50.00 | - | | | 50.00 | - | | | 50.00 | - | | | 50.00 | - | | |
| Resident ID's | Junior | 25.00 | - | | | 25.00 | - | | | 25.00 | - | | | 25.00 | - | | | 25.00 | - | | |
| Season Pass | Adult | 400.00 | 750.00 | | | 400.00 | 750.00 | | | 400.00 | 750.00 | | | 400.00 | 750.00 | | | 400.00 | 750.00 | | |
| Season Pass | Senior | 200.00 | 375.00 | | | 200.00 | 375.00 | | | 200.00 | 375.00 | | | 200.00 | 375.00 | | | 200.00 | 375.00 | | |
| HSR Revenue | | | | | | | | | | | | | | | | | | | | | |
| Weekend | 18-Hole A/S/J | 225,600 | 236,880 | 462,480 | | 225,600 | 236,880 | 462,480 | | 225,600 | 236,880 | 462,480 | | 225,600 | 236,880 | 462,480 | | 225,600 | 236,880 | 462,480 | |
| Weekday | 18-Hole Adult | 158,822 | 167,508 | 326,330 | | 158,822 | 167,508 | 326,330 | | 158,822 | 167,508 | 326,330 | | 158,822 | 167,508 | 326,330 | | 158,822 | 167,508 | 326,330 | |
| Weekday | 18-Hole Senior | 59,558 | 63,281 | 122,839 | | 59,558 | 63,281 | 122,839 | | 59,558 | 63,281 | 122,839 | | 59,558 | 63,281 | 122,839 | | 59,558 | 63,281 | 122,839 | |
| Weekday | 18-Hole Junior | 25,267 | 24,365 | 49,632 | | 25,267 | 24,365 | 49,632 | | 25,267 | 24,365 | 49,632 | | 25,267 | 24,365 | 49,632 | | 25,267 | 24,365 | 49,632 | |
| Weekend | 9-Hole A/S/J | 86,630 | 91,368 | 177,998 | | 86,630 | 91,368 | 177,998 | | 86,630 | 91,368 | 177,998 | | 86,630 | 91,368 | 177,998 | | 86,630 | 91,368 | 177,998 | |
| Weekday | 9-Hole Adult | 45,120 | 47,376 | 92,496 | | 45,120 | 47,376 | 92,496 | | 45,120 | 47,376 | 92,496 | | 45,120 | 47,376 | 92,496 | | 45,120 | 47,376 | 92,496 | |
| Weekday | 9-Hole Senior | 21,056 | 21,996 | 43,052 | | 21,056 | 21,996 | 43,052 | | 21,056 | 21,996 | 43,052 | | 21,056 | 21,996 | 43,052 | | 21,056 | 21,996 | 43,052 | |
| Weekday | 9-Hole Junior | 10,829 | 11,167 | 21,996 | | 10,829 | 11,167 | 21,996 | | 10,829 | 11,167 | 21,996 | | 10,829 | 11,167 | 21,996 | | 10,829 | 11,167 | 21,996 | |
| Revenue from Greens Fee: | | 632,883 | 663,941 | 1,296,824 | | 632,883 | 663,941 | 1,296,824 | | 632,883 | 663,941 | 1,296,824 | | 632,883 | 663,941 | 1,296,824 | | 632,883 | 663,941 | 1,296,824 | |
| Other Revenue | | | | | | | | | | | | | | | | | | | | | |
| Resident ID's | A/S/J | 216,250 | - | 216,250 | | 216,250 | - | 216,250 | | 216,250 | - | 216,250 | | 216,250 | - | 216,250 | | 216,250 | - | 216,250 | |
| Season Pass | A/S | 49,000 | 18,750 | 67,750 | | 49,000 | 18,750 | 67,750 | | 49,000 | 18,750 | 67,750 | | 49,000 | 18,750 | 67,750 | | 49,000 | 18,750 | 67,750 | |
| Locker Rentals | | - | - | - | | - | - | - | | - | - | - | | - | - | - | | - | - | - | |
| Cart Fees | | - | - | 305,000 | | - | - | 307,500 | | - | - | 310,000 | | - | - | 312,500 | | - | - | 315,000 | |
| Driving Range | | - | - | 150,000 | | - | - | 152,500 | | - | - | 155,000 | | - | - | 157,500 | | - | - | 160,000 | |
| Other Revenue | | 265,250 | 18,750 | 739,000 | | 265,250 | 18,750 | 744,000 | | 265,250 | 18,750 | 749,000 | | 265,250 | 18,750 | 754,000 | | 265,250 | 18,750 | 759,000 | |
| Total Revenue | | 898,133 | 682,691 | 2,035,824 | | 898,133 | 682,691 | 2,040,824 | | 898,133 | 682,691 | 2,045,824 | | 898,133 | 682,691 | 2,050,824 | | 898,133 | 682,691 | 2,055,824 | |

Town of Fairfield Golf Commission



H. Smith Richardson Golf Course

Appendix:

Downside Case Assumptions

| 2010 - 2011 | | | | 2011 - 2012 | | | | 2012 - 2013 | | | | 2013 - 2014 | | | | 2014 - 2015 | | | | | | | |
|------------------------------------|--------------------------|----------|---------|-------------|------|---------|---------|-------------|---------|---------|---------|-------------|------|----------|---------|-------------|------|---------|---------|-----------|---------|-------|---|
| | | Resident | Non-Res | Total | % | | | Resident | Non-Res | Total | % | | | Resident | Non-Res | Total | % | | | Resident | Non-Res | Total | % |
| HSR Number of Rounds | | | | | | | | | | | | | | | | | | | | | | | |
| Resident/Non-Resident Mix | | 68% | 32% | | | 68% | | 32% | | | | 69% | | 31% | | | | 70% | | 30% | | | |
| Weekend | 18-Hole A/S/J | 6,885 | 3,240 | 10,125 | 25% | 6,843 | 3,220 | 10,063 | 25% | 6,900 | 3,100 | 10,000 | 25% | 6,857 | 3,081 | 9,938 | 25% | 6,913 | 2,963 | 9,875 | 25% | | |
| Weekday | 18-Hole Adult | 6,059 | 2,851 | 8,910 | 22% | 6,021 | 2,834 | 8,855 | 22% | 6,072 | 2,728 | 8,800 | 22% | 6,034 | 2,711 | 8,745 | 22% | 6,083 | 2,607 | 8,690 | 22% | | |
| Weekday | 18-Hole Senior | 3,029 | 1,426 | 4,455 | 11% | 3,011 | 1,417 | 4,428 | 11% | 3,036 | 1,364 | 4,400 | 11% | 3,017 | 1,355 | 4,373 | 11% | 3,042 | 1,304 | 4,345 | 11% | | |
| Weekday | 18-Hole Junior | 1,652 | 778 | 2,430 | 6% | 1,642 | 773 | 2,415 | 6% | 1,656 | 744 | 2,400 | 6% | 1,646 | 739 | 2,385 | 6% | 1,659 | 711 | 2,370 | 6% | | |
| | | - | - | - | | - | - | - | | - | - | - | | - | - | - | | - | - | - | | | |
| Weekend | 9-Hole A/S/J | 4,957 | 2,333 | 7,290 | 18% | 4,927 | 2,318 | 7,245 | 18% | 4,968 | 2,232 | 7,200 | 18% | 4,937 | 2,218 | 7,155 | 18% | 4,977 | 2,133 | 7,110 | 18% | | |
| Weekday | 9-Hole Adult | 2,754 | 1,296 | 4,050 | 10% | 2,737 | 1,288 | 4,025 | 10% | 2,760 | 1,240 | 4,000 | 10% | 2,743 | 1,232 | 3,975 | 10% | 2,765 | 1,185 | 3,950 | 10% | | |
| Weekday | 9-Hole Senior | 1,377 | 648 | 2,025 | 5% | 1,369 | 644 | 2,013 | 5% | 1,380 | 620 | 2,000 | 5% | 1,371 | 616 | 1,988 | 5% | 1,383 | 593 | 1,975 | 5% | | |
| Weekday | 9-Hole Junior | 826 | 389 | 1,215 | 3% | 821 | 386 | 1,208 | 3% | 828 | 372 | 1,200 | 3% | 823 | 370 | 1,193 | 3% | 830 | 356 | 1,185 | 3% | | |
| | Total | 27,540 | 12,960 | 40,500 | 100% | 27,370 | 12,880 | 40,250 | 100% | 27,600 | 12,400 | 40,000 | 100% | 27,428 | 12,323 | 39,750 | 100% | 27,650 | 11,850 | 39,500 | 100% | | |
| HSR Number of ID's & Season Passes | | | | | | | | | | | | | | | | | | | | | | | |
| ID's | Adult | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | | |
| ID's | Senior | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | | |
| ID's | Junior | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | | |
| | Total | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | | |
| Season Pass | Adult | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | | |
| Season Pass | Senior | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | | |
| HSR Rates | | | | | | | | | | | | | | | | | | | | | | | |
| Weekend | 18-Hole A/S/J | 28.00 | 54.00 | | | 28.00 | 54.00 | | | 28.00 | 54.00 | | | 28.00 | 54.00 | | | 28.00 | 54.00 | | | | |
| Weekday | 18-Hole Adult | 22.00 | 42.00 | | | 22.00 | 42.00 | | | 22.00 | 42.00 | | | 22.00 | 42.00 | | | 22.00 | 42.00 | | | | |
| Weekday | 18-Hole Senior | 16.00 | 32.00 | | | 16.00 | 32.00 | | | 16.00 | 32.00 | | | 16.00 | 32.00 | | | 16.00 | 32.00 | | | | |
| Weekday | 18-Hole Junior | 12.00 | 24.00 | | | 12.00 | 24.00 | | | 12.00 | 24.00 | | | 12.00 | 24.00 | | | 12.00 | 24.00 | | | | |
| Weekend | 9-Hole A/S/J | 15.00 | 28.00 | | | 15.00 | 28.00 | | | 15.00 | 28.00 | | | 15.00 | 28.00 | | | 15.00 | 28.00 | | | | |
| Weekday | 9-Hole Adult | 14.00 | 28.00 | | | 14.00 | 28.00 | | | 14.00 | 28.00 | | | 14.00 | 28.00 | | | 14.00 | 28.00 | | | | |
| Weekday | 9-Hole Senior | 13.00 | 26.00 | | | 13.00 | 26.00 | | | 13.00 | 26.00 | | | 13.00 | 26.00 | | | 13.00 | 26.00 | | | | |
| Weekday | 9-Hole Junior | 11.00 | 22.00 | | | 11.00 | 22.00 | | | 11.00 | 22.00 | | | 11.00 | 22.00 | | | 11.00 | 22.00 | | | | |
| Resident ID's | Adult | 35.00 | - | | | 35.00 | - | | | 35.00 | - | | | 35.00 | - | | | 35.00 | - | | | | |
| Resident ID's | Senior | 35.00 | - | | | 35.00 | - | | | 35.00 | - | | | 35.00 | - | | | 35.00 | - | | | | |
| Resident ID's | Junior | 25.00 | - | | | 25.00 | - | | | 25.00 | - | | | 25.00 | - | | | 25.00 | - | | | | |
| Season Pass | Adult | 360.00 | 700.00 | | | 360.00 | 700.00 | | | 360.00 | 700.00 | | | 360.00 | 700.00 | | | 360.00 | 700.00 | | | | |
| Season Pass | Senior | 185.00 | 350.00 | | | 185.00 | 350.00 | | | 185.00 | 350.00 | | | 185.00 | 350.00 | | | 185.00 | 350.00 | | | | |
| HSR Revenue | | | | | | | | | | | | | | | | | | | | | | | |
| Weekend | 18-Hole A/S/J | 192,780 | 174,960 | 367,740 | | 191,590 | 173,880 | 365,470 | | 193,200 | 167,400 | 360,600 | | 191,993 | 166,354 | 358,346 | | 193,550 | 159,975 | 353,525 | | | |
| Weekday | 18-Hole Adult | 133,294 | 119,750 | 253,044 | | 132,471 | 119,011 | 251,482 | | 133,584 | 114,576 | 248,160 | | 132,749 | 113,860 | 246,609 | | 133,826 | 109,494 | 243,320 | | | |
| Weekday | 18-Hole Senior | 48,470 | 45,619 | 94,090 | | 48,171 | 45,338 | 93,509 | | 48,576 | 43,648 | 92,224 | | 48,272 | 43,375 | 91,648 | | 48,664 | 41,712 | 90,376 | | | |
| Weekday | 18-Hole Junior | 19,829 | 18,662 | 38,491 | | 19,706 | 18,547 | 38,254 | | 19,872 | 17,856 | 37,728 | | 19,748 | 17,744 | 37,492 | | 19,908 | 17,064 | 36,972 | | | |
| Weekend | 9-Hole A/S/J | 74,358 | 65,318 | 139,676 | | 73,899 | 64,915 | 138,814 | | 74,520 | 62,496 | 137,016 | | 74,054 | 62,105 | 136,160 | | 74,655 | 59,724 | 134,379 | | | |
| Weekday | 9-Hole Adult | 38,556 | 36,288 | 74,844 | | 38,318 | 36,064 | 74,382 | | 38,640 | 34,720 | 73,360 | | 38,399 | 34,503 | 72,902 | | 38,710 | 33,180 | 71,890 | | | |
| Weekday | 9-Hole Senior | 17,901 | 16,848 | 34,749 | | 17,791 | 16,744 | 34,535 | | 17,940 | 16,120 | 34,060 | | 17,828 | 16,019 | 33,847 | | 17,973 | 15,405 | 33,378 | | | |
| Weekday | 9-Hole Junior | 9,088 | 8,554 | 17,642 | | 9,032 | 8,501 | 17,533 | | 9,108 | 8,184 | 17,292 | | 9,051 | 8,133 | 17,184 | | 9,125 | 7,821 | 16,946 | | | |
| | Revenue from Greens Fee: | 534,276 | 486,000 | 1,020,276 | | 530,978 | 483,000 | 1,013,978 | | 535,440 | 465,000 | 1,000,440 | | 532,094 | 462,094 | 994,187 | | 536,410 | 444,375 | 980,785 | | | |
| Other Revenue | | | | | | | | | | | | | | | | | | | | | | | |
| Resident ID's | A/S/J | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | | |
| Season Pass | A/S | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | | |
| Locker Rentals | | - | - | 2,500 | | - | - | 2,250 | | - | - | 2,000 | | - | - | 1,750 | | - | - | 1,500 | | | |
| Cart Fees | | - | - | 250,000 | | - | - | 235,000 | | - | - | 230,000 | | - | - | 230,000 | | - | - | 230,000 | | | |
| Driving Range | | - | - | 120,000 | | - | - | 115,000 | | - | - | 110,000 | | - | - | 110,000 | | - | - | 110,000 | | | |
| | Other Revenue | 201,325 | 17,500 | 591,325 | | 201,325 | 17,500 | 571,075 | | 201,325 | 17,500 | 560,825 | | 201,325 | 17,500 | 560,575 | | 201,325 | 17,500 | 560,325 | | | |
| | Total Revenue | 735,601 | 503,500 | 1,611,601 | | 732,303 | 500,500 | 1,585,053 | | 736,765 | 482,500 | 1,561,265 | | 733,419 | 479,594 | 1,554,762 | | 737,735 | 461,875 | 1,541,110 | | | |

Town of Fairfield Golf Commission



H. Smith Richardson C

Appendix:

Downside Case Assumptions

| 2015 - 2016 | | | | | 2016 - 2017 | | | | | 2017 - 2018 | | | | | 2018 - 2019 | | | | | 2019 - 2020 | | | | |
|------------------------------------|---------|---------------------------|---------|-----------|-------------|---------|---------|-----------|---------|-------------|---------|-----------|---------|----------|-------------|-----------|---------|---------|---------|-------------|---------|---------|---|--|
| | | Resident | Non-Res | Total | % | | | Resident | Non-Res | Total | % | | | Resident | Non-Res | Total | % | | | Resident | Non-Res | Total | % | |
| HSR Number of Rounds | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Resident/Non-Resident Mix | | 70% | 30% | | | 71% | 29% | | | 71% | 29% | | | 72% | 28% | | | 72% | 28% | | | |
| Weekend | 18-Hole | A/S/J | 6,869 | 2,944 | 9,813 | 25% | 6,923 | 2,828 | 9,750 | 25% | 6,878 | 2,809 | 9,688 | 25% | 6,930 | 2,695 | 9,625 | 25% | 6,885 | 2,678 | 9,563 | 25% | | |
| Weekday | 18-Hole | Adult | 6,045 | 2,591 | 8,635 | 22% | 6,092 | 2,488 | 8,580 | 22% | 6,053 | 2,472 | 8,525 | 22% | 6,098 | 2,372 | 8,470 | 22% | 6,059 | 2,356 | 8,415 | 22% | | |
| Weekday | 18-Hole | Senior | 3,022 | 1,295 | 4,318 | 11% | 3,046 | 1,244 | 4,290 | 11% | 3,026 | 1,236 | 4,263 | 11% | 3,049 | 1,186 | 4,235 | 11% | 3,029 | 1,178 | 4,208 | 11% | | |
| Weekday | 18-Hole | Junior | 1,649 | 707 | 2,355 | 6% | 1,661 | 679 | 2,340 | 6% | 1,651 | 674 | 2,325 | 6% | 1,663 | 647 | 2,310 | 6% | 1,652 | 643 | 2,295 | 6% | | |
| | | | | - | - | | | - | - | | | - | - | | | - | - | | | - | - | | | |
| Weekend | 9-Hole | A/S/J | 4,946 | 2,120 | 7,065 | 18% | 4,984 | 2,036 | 7,020 | 18% | 4,952 | 2,023 | 6,975 | 18% | 4,990 | 1,940 | 6,930 | 18% | 4,957 | 1,928 | 6,885 | 18% | | |
| Weekday | 9-Hole | Adult | 2,748 | 1,178 | 3,925 | 10% | 2,769 | 1,131 | 3,900 | 10% | 2,751 | 1,124 | 3,875 | 10% | 2,772 | 1,078 | 3,850 | 10% | 2,754 | 1,071 | 3,825 | 10% | | |
| Weekday | 9-Hole | Senior | 1,374 | 589 | 1,963 | 5% | 1,385 | 566 | 1,950 | 5% | 1,376 | 562 | 1,938 | 5% | 1,386 | 539 | 1,925 | 5% | 1,377 | 536 | 1,913 | 5% | | |
| Weekday | 9-Hole | Junior | 824 | 353 | 1,178 | 3% | 831 | 339 | 1,170 | 3% | 825 | 337 | 1,163 | 3% | 832 | 323 | 1,155 | 3% | 826 | 321 | 1,148 | 3% | | |
| Total | | 27,475 | 11,775 | 39,250 | 100% | 27,690 | 11,310 | 39,000 | 100% | 27,513 | 11,238 | 38,750 | 100% | 27,720 | 10,780 | 38,500 | 100% | 27,540 | 10,710 | 38,250 | 100% | | | |
| HSR Number of ID's & Season Passes | | | | | | | | | | | | | | | | | | | | | | | | |
| ID's | Adult | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | 3,200 | | |
| ID's | Senior | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | |
| ID's | Junior | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | 750 | | |
| Total | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | 4,700 | | |
| Season Pass | Adult | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | 20 | 120 | | 100 | | |
| Season Pass | Senior | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | 10 | 55 | | 45 | | |
| HSR Rates | | | | | | | | | | | | | | | | | | | | | | | | |
| Weekend | 18-Hole | A/S/J | 28.00 | 54.00 | | 28.00 | 54.00 | | 28.00 | 54.00 | | 28.00 | 54.00 | | 28.00 | 54.00 | | 28.00 | 54.00 | | 28.00 | 54.00 | | |
| Weekday | 18-Hole | Adult | 22.00 | 42.00 | | 22.00 | 42.00 | | 22.00 | 42.00 | | 22.00 | 42.00 | | 22.00 | 42.00 | | 22.00 | 42.00 | | 22.00 | 42.00 | | |
| Weekday | 18-Hole | Senior | 16.00 | 32.00 | | 16.00 | 32.00 | | 16.00 | 32.00 | | 16.00 | 32.00 | | 16.00 | 32.00 | | 16.00 | 32.00 | | 16.00 | 32.00 | | |
| Weekday | 18-Hole | Junior | 12.00 | 24.00 | | 12.00 | 24.00 | | 12.00 | 24.00 | | 12.00 | 24.00 | | 12.00 | 24.00 | | 12.00 | 24.00 | | 12.00 | 24.00 | | |
| Weekend | 9-Hole | A/S/J | 15.00 | 28.00 | | 15.00 | 28.00 | | 15.00 | 28.00 | | 15.00 | 28.00 | | 15.00 | 28.00 | | 15.00 | 28.00 | | 15.00 | 28.00 | | |
| Weekday | 9-Hole | Adult | 14.00 | 28.00 | | 14.00 | 28.00 | | 14.00 | 28.00 | | 14.00 | 28.00 | | 14.00 | 28.00 | | 14.00 | 28.00 | | 14.00 | 28.00 | | |
| Weekday | 9-Hole | Senior | 13.00 | 26.00 | | 13.00 | 26.00 | | 13.00 | 26.00 | | 13.00 | 26.00 | | 13.00 | 26.00 | | 13.00 | 26.00 | | 13.00 | 26.00 | | |
| Weekday | 9-Hole | Junior | 11.00 | 22.00 | | 11.00 | 22.00 | | 11.00 | 22.00 | | 11.00 | 22.00 | | 11.00 | 22.00 | | 11.00 | 22.00 | | 11.00 | 22.00 | | |
| Resident ID's | Adult | 35.00 | - | | 35.00 | - | | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | |
| Resident ID's | Senior | 35.00 | - | | 35.00 | - | | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | 35.00 | - | |
| Resident ID's | Junior | 25.00 | - | | 25.00 | - | | 25.00 | - | 25.00 | - | 25.00 | - | 25.00 | - | 25.00 | - | 25.00 | - | 25.00 | - | 25.00 | - | |
| Season Pass | Adult | 360.00 | 700.00 | | 360.00 | 700.00 | | 360.00 | 700.00 | 360.00 | 700.00 | | 360.00 | 700.00 | | 360.00 | 700.00 | | 360.00 | 700.00 | | 360.00 | | |
| Season Pass | Senior | 185.00 | 350.00 | | 185.00 | 350.00 | | 185.00 | 350.00 | 185.00 | 350.00 | | 185.00 | 350.00 | | 185.00 | 350.00 | | 185.00 | 350.00 | | 185.00 | | |
| HSR Revenue | | | | | | | | | | | | | | | | | | | | | | | | |
| Weekend | 18-Hole | A/S/J | 192,325 | 158,963 | 351,288 | | 193,830 | 152,685 | 346,515 | | 192,588 | 151,706 | 344,294 | | 194,040 | 145,530 | 339,570 | | 192,780 | 144,585 | 337,365 | | | |
| Weekday | 18-Hole | Adult | 132,979 | 108,801 | 241,780 | | 134,020 | 104,504 | 238,524 | | 133,161 | 103,835 | 236,995 | | 134,165 | 99,607 | 233,772 | | 133,294 | 98,960 | 232,254 | | | |
| Weekday | 18-Hole | Senior | 48,356 | 41,448 | 89,804 | | 48,734 | 39,811 | 88,546 | | 48,422 | 39,556 | 87,978 | | 48,787 | 37,946 | 86,733 | | 48,470 | 37,699 | 86,170 | | | |
| Weekday | 18-Hole | Junior | 19,782 | 16,956 | 36,738 | | 19,937 | 16,286 | 36,223 | | 19,809 | 16,182 | 35,991 | | 19,958 | 15,523 | 35,482 | | 19,829 | 15,422 | 35,251 | | | |
| Weekend | 9-Hole | A/S/J | 74,183 | 59,346 | 133,529 | | 74,763 | 57,002 | 131,765 | | 74,284 | 56,637 | 130,921 | | 74,844 | 54,331 | 129,175 | | 74,358 | 53,978 | 128,336 | | | |
| Weekday | 9-Hole | Adult | 38,465 | 32,970 | 71,435 | | 38,766 | 31,668 | 70,434 | | 38,518 | 31,465 | 69,983 | | 38,808 | 30,184 | 68,992 | | 38,556 | 29,988 | 68,544 | | | |
| Weekday | 9-Hole | Senior | 17,859 | 15,308 | 33,166 | | 17,999 | 14,703 | 32,702 | | 17,883 | 14,609 | 32,492 | | 18,018 | 14,014 | 32,032 | | 17,901 | 13,923 | 31,824 | | | |
| Weekday | 9-Hole | Junior | 9,067 | 7,772 | 16,838 | | 9,138 | 7,465 | 16,602 | | 9,079 | 7,417 | 16,496 | | 9,148 | 7,115 | 16,262 | | 9,088 | 7,069 | 16,157 | | | |
| Revenue from Greens Fee: | | 533,015 | 441,563 | 974,578 | | 537,186 | 424,125 | 961,311 | | 533,743 | 421,406 | 955,149 | | 537,768 | 404,250 | 942,018 | | 534,276 | 401,625 | 935,901 | | 534,276 | | |
| Other Revenue | | | | | | | | | | | | | | | | | | | | | | | | |
| Resident ID's | A/S/J | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | 157,000 | - | 157,000 | | 157,000 | | |
| Season Pass | A/S | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | 44,325 | 17,500 | 61,825 | | 44,325 | | |
| Locker Rentals | | - | - | 1,250 | | - | - | 1,000 | | - | - | 750 | | - | - | 500 | | - | - | 250 | | - | | |
| Cart Fees | | - | - | 230,000 | | - | - | 230,000 | | - | - | 230,000 | | - | - | 230,000 | | - | - | 230,000 | | - | | |
| Driving Range | | - | - | 110,000 | | - | - | 110,000 | | - | - | 110,000 | | - | - | 110,000 | | - | - | 110,000 | | - | | |
| Other Revenue | | 201,325 | 17,500 | 560,075 | | 201,325 | 17,500 | 559,825 | | 201,325 | 17,500 | 559,575 | | 201,325 | 17,500 | 559,325 | | 201,325 | 17,500 | 559,075 | | 201,325 | | |
| Total Revenue | | 734,340 | 459,063 | 1,534,653 | | 738,511 | 441,625 | 1,521,136 | | 735,068 | 438,906 | 1,514,724 | | 739,093 | 421,750 | 1,501,343 | | 735,601 | 419,125 | 1,494,976 | | 735,601 | | |



Appendix: Explanation of Assumptions – Base Case

| | |
|--------------------------------|--|
| Number of Rounds: | <p>The total number of rounds in 2010-2011 was assumed to be 42,500.</p> <p>Rounds are assumed to increase by 1,000 rounds per year for four years, by 500 in the fifth year, and level off at 47,000 rounds per year for the remainder of the plan.</p> <p>The distribution of rounds between resident and non-resident were spread in the first year consistently with the 2009 season at 68% resident and 32% non-resident.</p> <p>Resident rounds were held fairly static with a very slight increase in rounds over the first five years of the plan – roughly 250 rounds per year for the first five years of the plan.</p> <p>Non-resident rounds were more dynamic in the plan, reflecting the non-residents choice to play more golf at HSR as the condition of the course improves. The distribution of rounds for non-residents was increased by 1% each year up to 36% in 2015 and level thereafter.</p> <p>The distribution of rounds between weekend, weekday, 18-hole, 9-hole, adults, seniors & juniors were spread throughout the 10-year plan consistently with the 2009 distribution.</p> |
| ID's and Season Passes: | <p>The ID's and season passes were assumed to be roughly that of the 2009 season and held flat throughout the 10-year plan.</p> |
| Rates & Fees: | <p>The rates and fees for the first three years of the plan were held flat from the 2009 season.</p> <p>In 2013, rates were increased roughly \$2 on 18-hole rounds and \$1 on 9-hole rounds. ID's for adults and seniors increased from \$35 to \$50. Season passes increased commensurately.</p> <p>The rates and fees for the remainder of the plan were left unchanged from the 2013 season.</p> |
| Other Revenue: | <p>Locker rental fees were held flat at \$2,500 for three years then eliminated once the clubhouse is replaced.</p> <p>Cart fees start at \$275K then increase to \$290K after the drainage issues on hole numbers 10 and 18 are remedied. Cart revenues increase \$2,500 per year thereafter.</p> <p>Driving Range fees start at \$130K, increased to \$140K in the second year and increased by \$2,500 per year thereafter.</p> |
| Operating Expenses: | <p>Operating Expenses are assumed to be the same in both cases. They start at \$1,450,000, effectively flat from the 2009 – 2010 estimate, and increase by 3% annually.</p> |



Appendix: Explanation of Assumptions – Downside Case

| | |
|--------------------------------|---|
| Number of Rounds: | <p>The total number of rounds in 2010-2011 was assumed to be 40,500.</p> <p>Rounds are assumed to decrease by 250 rounds per year throughout the 10-year plan dropping to 38,250 in the final year of the plan.</p> <p>The distribution of rounds between resident and non-resident were spread in the first year consistently with the 2009 season at 68% resident and 32% non-resident.</p> <p>Resident rounds were held fairly static with a very slight variation in rounds over the plan. The plan begins and ends with 27,540 resident rounds per year.</p> <p>Non-resident rounds drive the change in rounds each year, dropping roughly 250 rounds per year. This reflects the non-residents choice to play less golf at HSR as the condition of the course continues to deteriorate. The distribution of rounds for non-residents decreased by 1% every other year down from 32% at the start of the plan to 28% at the end of the plan.</p> <p>The distribution of rounds between weekend, weekday, 18-hole, 9-hole, adults, seniors & juniors were spread throughout the 10-year plan consistently with the 2009 distribution.</p> |
| ID's and Season Passes: | <p>The ID's and season passes were assumed to be roughly that of the 2009 season and held flat throughout the 10-year plan.</p> |
| Rates & Fees: | <p>The rates and fees from the 2009 season were left unchanged throughout the plan -- reflecting the inability to justify rate increases due to the condition of the course.</p> |
| Other Revenue: | <p>Locker rental fees start at \$2,500 in the first year and decline by \$250 per year each year throughout the plan. This reflects the continued decline in the condition of the clubhouse and locker room.</p> <p>Cart fees start at \$250K decrease to \$235K in the first year, then decrease to \$230K in the second year and remain at \$230K for the remainder of the plan.</p> <p>Driving Range fees start at \$120K, decrease by \$5K in the next two years and remain flat at \$110K for the remainder of the plan.</p> |
| Operating Expenses: | <p>Operating Expenses are assumed to be the same in both cases. They start at \$1,450,000, effectively flat from the 2009 – 2010 estimate, and increase by 3% annually.</p> |

Town of Fairfield Golf Commission



Addendum to HSR 10 Year Plan

Examples of Current Condition of Bunkers

- The following pictures were taken two days after a rain storm in October 2009.
- There are 16 examples of bunkers that are no longer functioning properly.
- In a properly functioning bunker, there is sufficient sand, the sand is not contaminated with the underlying soil, and rain water will drain through the sand to a drainage system.
- Almost all of the bunkers at HSR have inadequate and contaminated sand, failed drainage systems, and are in need of renovation.
- Many man-hours are being wasted by our maintenance staff which is forced to try and manually drain bunkers after each rainstorm.

An improperly functioning bunker will cost more in maintenance over time than a properly functioning bunker.



15th Fairway



11th Greenside



15th Greenside



13th Fairway



15th Fairway



17th Fairway



13th Fairway



13th Fairway



15th Greenside



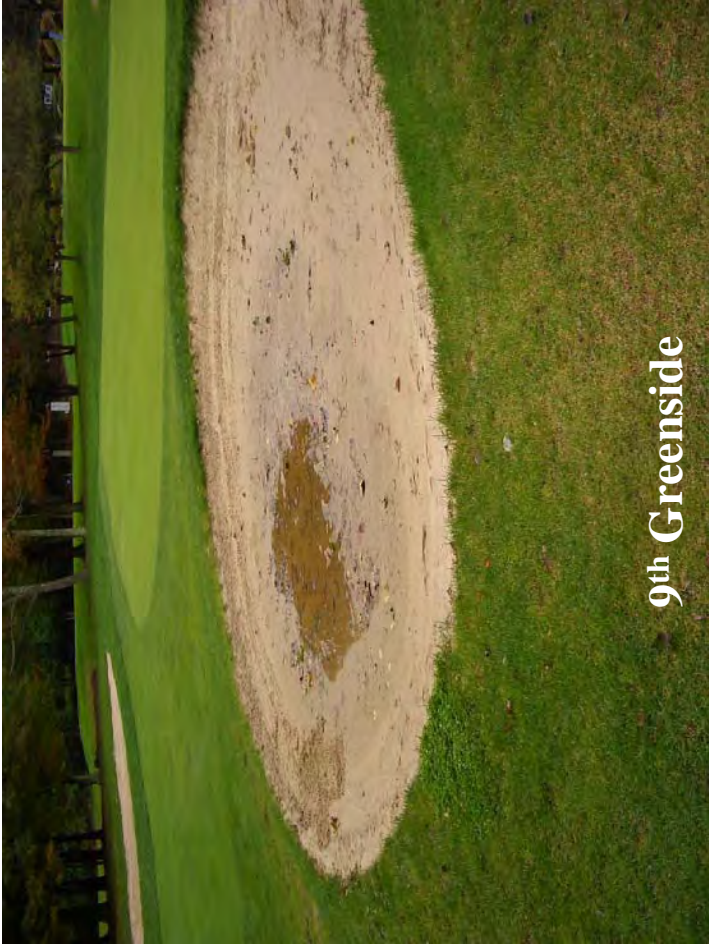
15th Fairway



18th Greenside



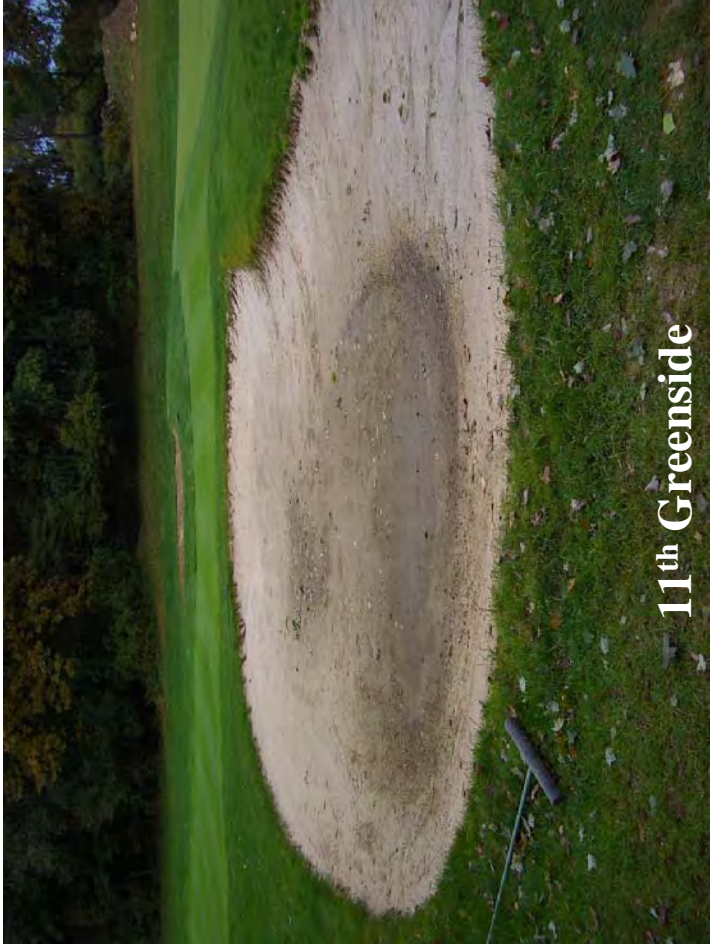
6th Fairway



9th Greenside



11th Greenside



11th Greenside



12th Greenside

Town of Fairfield Golf Commission



Addendum to HSR 10 Year Plan

The Cost of Bunker Renovation and Maintenance

- The following is an article from the United States Golf Association from July of 2008, which focuses on the cost of bunker renovation and maintenance.
- The USGA article is relevant to HSR in several aspects:
 - Currently, almost all of HSR's bunkers are improperly functioning and are in need of renovation.
 - The article expresses, succinctly and in layman's terms, the alternatives available in a bunker restoration project, the potential costs, the impact of those alternatives on maintenance, and why a bunker renovation project may be necessary.
- HSR does not, and will not, have the maintenance budget or staff to implement the maintenance programs followed by other courses – but this is a contributing factor as to why our bunkers are in need of renovation.

Fortunately, HSR was designed with fairly shallow bunkers which are less costly to renovate and maintain, and should last longer than more complex bunker designs.

The Money Pit

Do golfers really understand how much bunkers cost?

BY JAMES F. MOORE

USGA folks and Rules aficionados are fond of correcting golfers who refer to sand bunkers as “traps.” However, given the rapidly rising cost of building and maintaining bunkers, the word *trap* might better describe the overall impact on golfers’ pocketbooks. For a variety of reasons discussed in this article, bunkers may well have passed greens in terms of their ultimate cost to the consumer.

This article addresses construction, maintenance, and golfer expectations, and how each affects the overall cost of bunkers on a high-quality course. Right or wrong, these courses often define golfers’ expectations of what they would like to have at their course. Unfortunately, few golfers realize how costly it would be to have what they see on television.

The figures quoted in this article are derived from extensive telephone interviews with golf course superintendents, golf course builders, sand suppliers, bunker liner distributors, and trucking companies. It should be kept in mind that the figures represent broad ranges and that all of the costs associated with the construction of bunkers are highly subject to change — largely due to the uncertainty of fuel costs.

DESIGN

Bunker design has perhaps the greatest impact on the long-term cost of maintaining bunkers. Steep, flashed sand bunker faces may be striking to the eye, but they are also extremely prone to erosion during even moderate rain events. A great deal of hand labor is frequently necessary to shovel the sand back onto the faces. Newly shoveled sand is loose and soft and thus prone to “fried-egg” lies until it has had time to compact. Heavy rain events often move not only the sand but the underlying soil as well. This soil contaminates the sand with silt and clay, quickly reducing the sand’s ability to drain. Eventually, the sand becomes so contaminated that it must be completely replaced. Although bunker liners have helped reduce erosion and contamination, they are expensive to install and maintain. This is discussed in greater detail below. Grass faces



While grass faces eliminate the problem of erosion, they still require extensive maintenance — often by hand.



Drainage is critical in every bunker construction project and typically costs approximately \$5.00 to \$6.00 per linear foot.

are far less prone to erosion problems, but often they are difficult to mow and even more difficult to irrigate and fertilize. They are also far less dramatic in appearance and therefore utilized to a lesser extent by most architects.

In addition to determining the style of bunker faces, architects determine the shape of the perimeters. Bunkers with intricately shaped, serpentine lines require a great deal of extra hand labor for edging and are therefore more costly to maintain.

Perhaps the greatest single design factor affecting the cost of construction and the maintenance of bunkers is simply how many there are on the course. Most courses have from two to three bunkers per hole, but there are courses with more than 200 and courses that have no bunkers at all. Based on survey data from the Golf Course Builders Association of America (GCBA — Golf Course Builders Association of America 2008 *Construction Guide Tool* compact disc), the average total square footage is about 100,000 square feet, with the average size of a single bunker being about 1,500 square feet.

CONSTRUCTION

Although there are many ways to build bunkers, all utilize a similar sequence of steps.

Construction of the Core, Subgrade Preparation, and Edging

This step involves the digging of the hole and the shaping of the bunker floor and edges. Large, simply shaped bunkers can often be built with small dozers and skid loaders. Small, intricately shaped bunkers require extensive hand shaping, which drives up the cost. A broad estimate of the cost of this step ranges from \$.75 to \$1.50 per square foot.

Install Drainage System

Subsurface tile drainage is utilized in most bunker construction and typically is installed by digging 8-inch-wide ditches 8 to 10 inches deep. Perforated 4-inch drainage pipe is placed in the ditches and covered with gravel. Approximately 150 linear feet of drainage tile is used in a 1,500-square-foot bunker, with an installation cost of about \$5.00 to \$6.00 per linear foot (including materials).

Liners

Liners are a relatively new concept for bunkers and are available in a very wide range of materials and designs (far too many to discuss in this article). All liners are installed between the soil floor of the bunker (subgrade) and the sand. Liners are claimed to reduce the erosion of sand from the bunker faces and, as a result, reduce the contamination of the sand with soil, thus prolonging its ability to drain. Liners fall into two broad categories — those that are rolled out over the bunker floor, much like carpet, and those that are sprayed or spread over the floor to form a sealant. The cost of liners varies widely depending on their thickness and composition, while the cost of installation varies a great deal depending on the amount of hand work necessary. Roll-out liners range from \$0.25 to \$0.75 per square foot, with installation adding \$1.00 to \$2.00 per square foot. The sealant-type liners are usually installed by the liner representative and typically range from \$1.00 to \$1.50 per square foot (including materials).

A hidden cost of all liners is the labor necessary to avoid damaging them during bunker maintenance. Sufficient sand must be continuously maintained over the liners to prevent contact by golfers and maintenance equipment. For this reason, many golf course superintendents find it necessary to hand-rake bunkers with liners. This can be extremely expensive, as discussed below under “Maintenance.”

Bunker Sand

At one time, selecting a sand for use in bunkers was a fairly simple task. Typically, a mason or brick sand would be purchased from a local sand and gravel plant. The sand was then hauled the relatively short distance to the course, resulting in extremely reasonable trucking charges. Fuel surcharges were a rarity.

Things have changed. Ironically, one of the most contentious aspects of course maintenance today is the playing quality of a hazard — the bunker. In an effort to find the “perfect” sand for their bunkers, golfers seem to be willing to pay any price. In addition, it is not uncommon for courses to select a sand that must be hauled hundreds and even thousands of miles, resulting in freight and fuel charges that can far exceed the cost of the sand itself.

The cost of sand is usually made up of three factors: 1) the cost of the sand, 2) the cost of the freight, and 3) the addition of a fuel surcharge. In many states you also have to pay tax on the product or the freight (including the fuel surcharge), and in some cases both. For example, Pennsylvania taxes both at a rate of 6%.

Bunker sands today fall into two broad categories. Native sands are sand products that are mined and then screened to achieve the proper particle size distribution. As a general rule, screened native sands range from \$15.00 to \$25.00 per ton FOB (the cost at the plant in this case). Manufactured or crushed sands make up the second category. These are sands that are mined and then passed through a crushing device. They are sometimes screened after crushing. The crushing process typically doubles the cost of the sand, with manufactured sand ranging from \$30 to \$50 per ton FOB.

The sand must then be hauled to the project. In most cases, trucks carrying 23- to 25-ton loads will be used to haul the product. The cost of hauling is affected by many factors, including tolls, traffic (time), and distance. In most cases, the 23-ton load costs from \$1.75 to \$3.50 per mile. Assuming \$2.00 per mile, trucking the sand 100 miles would result in a freight charge of \$200.

Unfortunately, that will not be the final cost of the sand. Given the rapid rise of the cost of fuel, trucking companies must now add a fuel surcharge on top of the freight charge. As everyone knows, the cost of fuel varies regionally, and thus surcharges do as well. Surcharges can range from 10% to 30%. Assuming 20%, our \$200 freight charge has increased to \$240 per 23-ton load per 100 miles.

Yet another caveat regarding fuel expense is the fact that the cost per gallon of fuel can rise quickly. When contractors are trying to bid on a project, they must estimate what fuel charges will be at the time they purchase the sand. How-

ever, since sand is often not installed in bunkers until the very end of a construction project, a year might elapse between the time the bid is submitted and the time the sand is actually purchased. Does anyone want to try to guess what diesel fuel will cost a year from now? For this reason, the fuel surcharge is very likely to change from the time you first check on the cost of the trucking until the time the product is actually hauled.

Sand Installation

The cost of placing four inches of sand into a bunker cavity ranges from \$10.00 to \$14.00 per ton. Based on a telephone survey of five of the most commonly used sand suppliers across the country, new golf course construction typically utilizes from 2,500 to 3,000 tons of bunker sand, while renovations often require less — in the range of 1,500 to 2,500 tons.



Combined Cost of Construction, Sand, and Freight

Adding up these individual charges illustrates just how expensive it is to add bunkers to a golf course construction project. As an example, let's assume we are building a new course that will have three to four bunkers per hole, with each bunker approximately 1,500 square feet in area, for a total of 100,000 square feet of bunkers. We will use a liner and we will purchase a manufactured sand from a plant 300 miles away. Our project will require 3,000 tons of sand.

Intricate designs are eye-catching and dramatic. However, the extensive hand labor necessary to build and maintain them makes them extremely expensive.

| | |
|---|------------------|
| Construction at \$1.00 per square foot | \$100,000 |
| Install 1,000 linear feet of drainage at \$5.50 per foot | 5,500 |
| Purchase and install liner at \$1.50 per square foot | 150,000 |
| Purchase 3,000 tons of sand at \$35.00 per ton | 105,000 |
| Ship sand to project at \$2.00 per mile (Each truckload will cost \$200. 3,000 tons will require 131 truckloads or \$26,200) | 26,200 |
| Fuel surcharge of 20% | 5,240 |
| Install sand in bunkers at \$12.00 per ton | 36,000 |
| Total bunker cost | \$427,940 |

Based on the assumptions in the table, our bunkers will cost \$4.28 per square foot or about \$6,400 per bunker.

MAINTENANCE

As frightening as the cost to add bunkers to a course might be, an even greater expense is their perpetual maintenance. As the Green Section agronomists travel the country and visit courses of all budget levels, the most common complaints from golfers involve bunkers. Depth of sand, "fried-egg" lies, lack of consistency, and even varying moisture levels are all sources of dissatisfaction. Many golfers believe they are entitled to a certain quality of lie in a bunker and that anything less is a sign of poor maintenance or bad sand, and usually both. Unlike the other hazards on the course, bunkers now have to be "fair."

As noted earlier, architects frequently use bunkers for aesthetic reasons as well as to add challenge to the course. The bright white sand in a bunker provides a beautiful contrast to the acres of green, intensively manicured turf surrounding it. During televised golf events, aerial cameras zoom in on perfectly edged bunkers with perfectly groomed sand that come closer to resembling oriental gardens than hazards. So how do superintendents produce such "works of art"? They do so by using a lot of hand labor to complete a variety of tasks. In preparation for this article, I surveyed ten superintendents across the country at courses that are known for top-quality bunkers. What follows is a summary of their practices.

Raking

Raking is usually broken down into two types — a full raking and a touch-up procedure. Full

raking is a total grooming of the entire sand area, while touch-up simply corrects any irregularities in the sand left by careless golfers. Most of the courses hand-rake the bunkers in lieu of powered equipment. This is done to create a firmer surface and to avoid contacting the liners.

Edging/Trimming

Keeping those sharp, well-defined edges requires a lot of hand trimming. During the times of the year when grass is actively growing, the courses contacted trim weekly using line trimmers. Edging using a sidewalk edger or similar equipment is typically a monthly task in the parts of the country that use cool-season grasses, while those with bermudagrass conduct this task twice per month. After a bunker is edged, additional labor is necessary to clean up the debris.

Mowing

Courses with grass faces have to mow regularly to keep a manicured look. Floating mowers are the most common tool due to the steep slopes associated with most bunker designs. Mowing is a weekly task and one that is almost always followed by blowing clippings out of the bunker.

Leaf and Clipping Removal (Blowing)

A surprisingly high labor requirement in bunkers is the need to constantly remove leaves, grass clippings, and other debris. Most of the courses contacted for this article viewed this task as a daily necessity, involving at least two laborers with backpack blowers.

Packing Sand Faces

Few things anger golfers more than a ball plugged into a steep sand face. As mentioned earlier, the sand on these faces is often loose as a result of having to be periodically moved back onto the face from the lower part of the bunker. To reduce plugging as much as possible, the maintenance crew has to pack the faces with hand tampers. Obviously, the more often the sand is washed off the faces by rain or runoff, the more often the packing process must be done. This operation is conducted once or twice per month.

Checking Sand Depth

Keeping the sand at the proper depth on the bunker faces also helps reduce fried-egg lies. For courses with liners, it is an absolute necessity



to keep enough sand over the liner to prevent players from contacting it during a shot. The goal is to maintain a depth of 1 to 2 inches on the bunker faces. To achieve this goal, the depth must be checked weekly and reestablished with hand shoveling as necessary.

Replacing Lost Sand

Sand is gradually lost from bunkers as a result of being blasted out by players, blown out by wind, and removed by the maintenance staff. Following heavy rains it is commonplace for the sand in the lowest portion of a bunker to be covered with a thin layer of silt and clay, as well as organic debris that has blown or floated into the bunker. This layer should be removed to prevent plugging of the sand pores, which in turn will reduce the sand's ability to drain. One or 2 inches of new sand should be added annually, as opposed to adding greater amounts over a longer period. By adding smaller amounts more frequently, the problem of a deep layer of new soft sand is eliminated.

Pumping

As bunkers age, their ability to drain rapidly decreases. Heavy rains can result in older bunkers looking more like water hazards. To restore the bunkers for play as quickly as possible, crews are sent out with pumps and shovels. After the water is pumped out, the silt and clay layer is removed

and the bunker is allowed to dry out enough to hand rake.

Maintenance Summary

Given the very high labor requirements necessary to keep bunkers in top condition seven days per week, all of the courses contacted have established specialized bunker crews, often led by a bunker foreman. These teams perform all the tasks described above and are reinforced with additional crew members following heavy floods or when large volumes of new sand must be added.

Bunker crew sizes and schedules varied widely, depending on the number and design of bunkers. Keeping in mind that all ten courses are considered high-end facilities in their region, the least demanding schedule devoted 4 to 6 workers, spending 6 hours per day on the bunkers, 6 to 7 days per week, or a total of approximately 200 labor hours weekly. Another course sent out 13 employees each day for 5 hours per day, 4 to 5 times per week, for a weekly total of about 275 hours. The highest labor commitment in this survey utilized an average of 8 workers, 8 hours per day, 7 days per week, for a weekly total of about 450 hours.

With hourly wages for these workers in the \$8.50- to \$9.50-per-hour range, it is obvious that bunker maintenance has become extremely expensive. In fact, all of the superintendents contacted expressed the opinion that the cost of

Liners are effective in reducing contamination of sand with underlying soil. However, they are expensive to install and difficult to maintain.

maintaining bunkers at their courses was now approaching, and in some cases exceeding, the cost of maintaining greens.

CONCLUSION

Given the data described in this article, the reader should be convinced that bunkers are extremely expensive features to add to any golf course. They are expensive to build and even more expensive to maintain — at least at the level many golfers today are demanding. Although the wealthiest courses have the funding available to maintain bunkers at championship quality on a daily basis, the rest of the golfing world needs to be more realistic about how to best use their more limited resources. The following list of suggestions is offered with this in mind.

- Make every effort to educate players at your course concerning the cost of maintaining bunkers at a high level. This article should help.
- Eliminate bunkers on your course that seldom come into play and/or are rarely seen. At the very least, convert them to grass hollows, but do so in a professional manner. Simply removing the sand and filling the cavity with soil is not the answer. Hire a professional golf course contractor to do the work, including the reshaping of the surrounding area to create a more natural appearance.
- Convert those high, flashed sand faces to grass. Although grass faces still require a great deal of effort, they reduce erosion problems, thus prolonging the life of the sand.
- Include funding in the capital improvement budget to rebuild the bunkers every 5 to 7 years. Typically, this involves removing the old sand, installing new drains, and installing new sand. This interval can easily be stretched to 7 to 10

years if players are willing to tolerate less than ideal conditions for a few days following heavy rains.

- Bunkers do not have to be raked on a daily basis — that is, if golfers make a better effort to rake out their footprints. Unfortunately, this aspect of golf etiquette seems to have slipped even more than the fixing of pitch marks. Courses with small budgets might even solicit the aid of their players by asking them to volunteer to touch up certain bunkers — much like the roadside litter programs popular in many states.
- Be sure to check local sands when purchasing new sand for bunkers. Have the local sands tested by an accredited laboratory before assuming that the only good sand for your bunkers is three states away.
- Of course, the biggest saving of all will come from convincing your golfers that the bunkers are hazards and that players simply cannot and should not be guaranteed a perfect lie every time. If you figure out how to do this, please contact the Green Section agronomists immediately so we can share your “cure” with the rest of the country.

ENDNOTE: The author would like to thank all those who participated in the telephone interviews. Special thanks is extended to the Golf Course Builders Association of America for their assistance. GCBA has developed an excellent tool to help estimate the cost of construction of bunkers as well as all other areas of a golf course. This CD-based tool can be obtained by visiting www.gcbaa.org.

JIM MOORE is director of the Green Section's Construction Education Program.

The cost of bunker maintenance can be reduced by converting flashed sand faces to grass. The conversion process itself is labor intensive and expensive.

