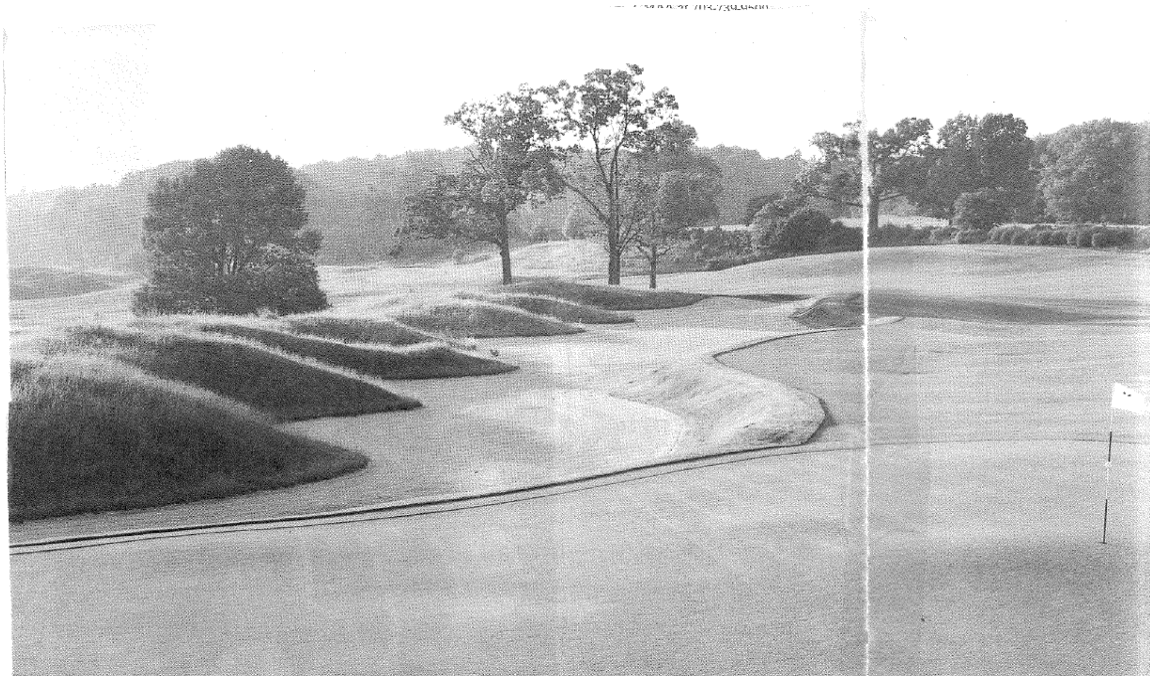


# Elcona CC Golf Course Improvement Plan

Ryan Cummings, Tom Thome, Tom Zimmerman

10/4/2019





Examples of flat bottom bunkers, with maintainable grass slopes





						Current	Proposed 8/6/19
					PF	2	2
		Current	Proposed		1	3	2
					2	4	2
Bunkers		59	44		3	4	3
					4	4	3
Sq. Footage		74410	48462		5	4	2
					6	3	2
					7	8	5
					8	2	2
					9	1	0
					10	3	1
					11	2	3
					12	2	2
					13	4	3
					14	5	4
					15	0	0
					16	4	4
					17	3	3
					18	1	1
					Total	59	44

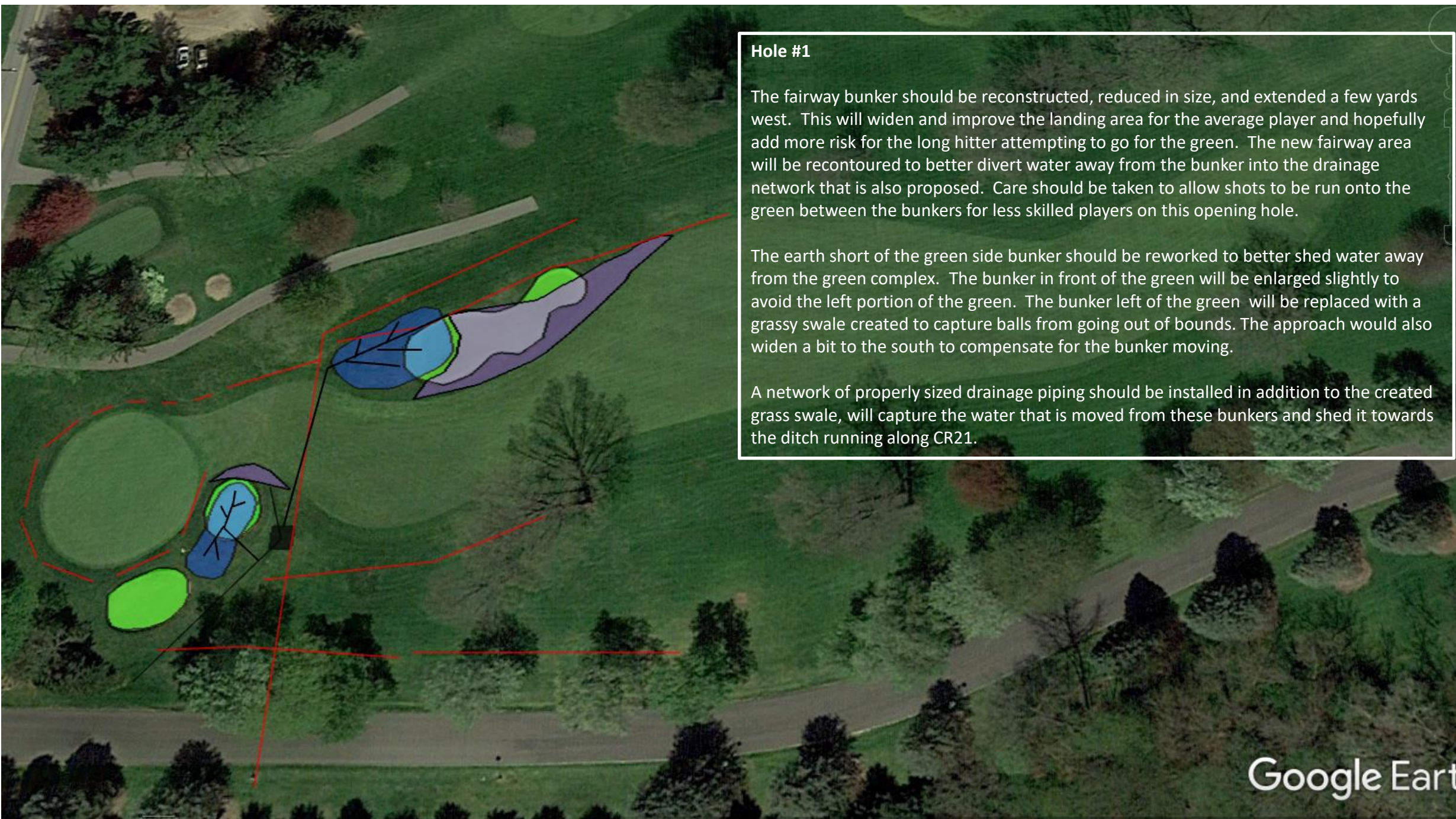
Bunker #	Hole #	Location	Bunker (Existing)	Bunker Proposed	Bentgrass sq ft	Bluegrass sq ft	Disturbed	Gravel tons	Sand tons	Drainage
	Totals		74,410	48,642	28,243	72,449	149,334	420	946	2,702
	SQ YARDS					8,050				



### Legend

- Green = Location of Existing Bunker
- Blue = Location of Proposed Bunker
- Black Lines= Drainage Needed
- Purple = Expansion of Bentgrass areas
- Red Lines = Existing Irrigation in Proximity





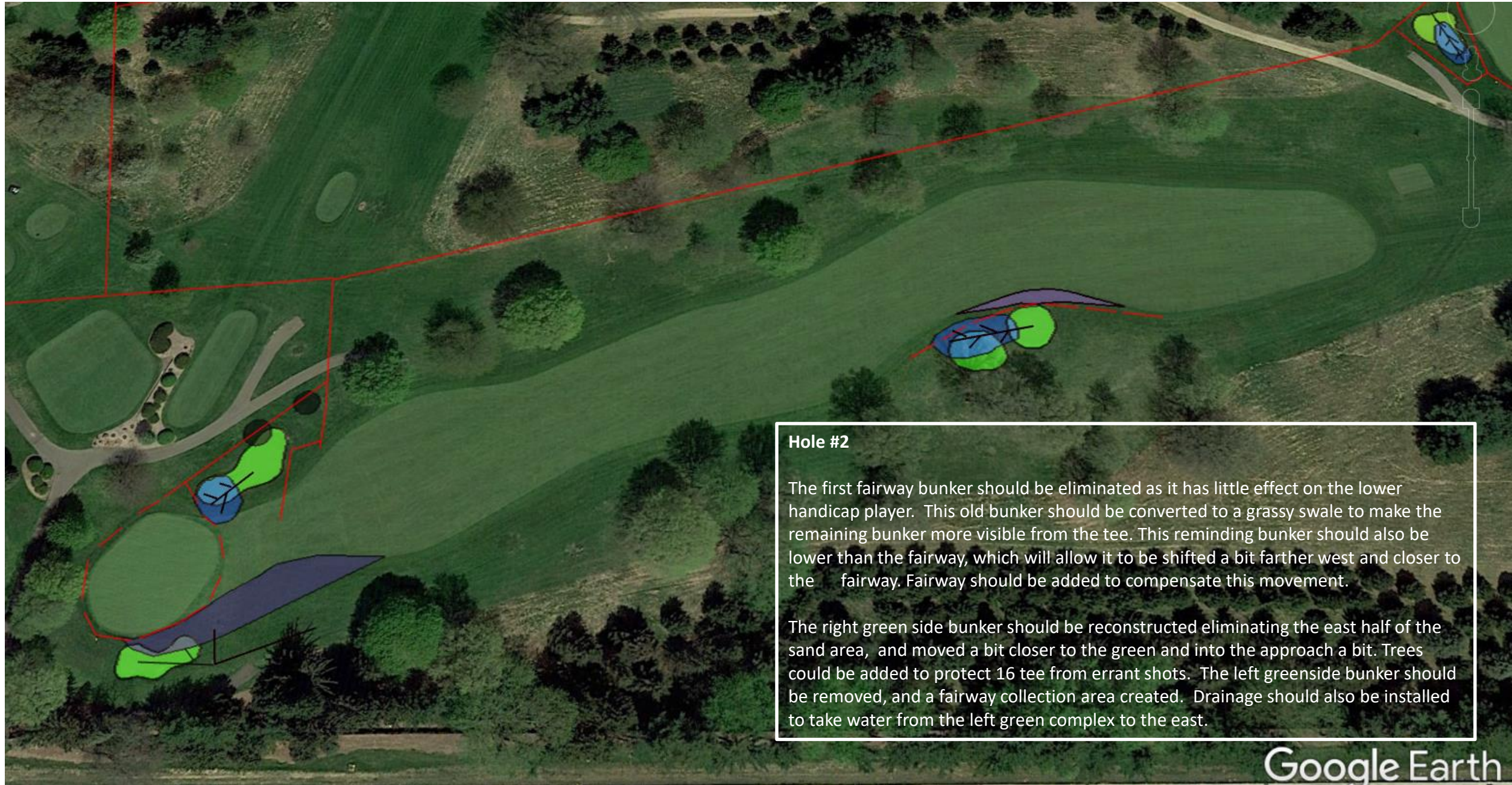
### Hole #1

The fairway bunker should be reconstructed, reduced in size, and extended a few yards west. This will widen and improve the landing area for the average player and hopefully add more risk for the long hitter attempting to go for the green. The new fairway area will be recontoured to better divert water away from the bunker into the drainage network that is also proposed. Care should be taken to allow shots to be run onto the green between the bunkers for less skilled players on this opening hole.

The earth short of the green side bunker should be reworked to better shed water away from the green complex. The bunker in front of the green will be enlarged slightly to avoid the left portion of the green. The bunker left of the green will be replaced with a grassy swale created to capture balls from going out of bounds. The approach would also widen a bit to the south to compensate for the bunker moving.

A network of properly sized drainage piping should be installed in addition to the created grass swale, will capture the water that is moved from these bunkers and shed it towards the ditch running along CR21.





### Hole #2

The first fairway bunker should be eliminated as it has little effect on the lower handicap player. This old bunker should be converted to a grassy swale to make the remaining bunker more visible from the tee. This reminding bunker should also be lower than the fairway, which will allow it to be shifted a bit farther west and closer to the fairway. Fairway should be added to compensate this movement.

The right green side bunker should be reconstructed eliminating the east half of the sand area, and moved a bit closer to the green and into the approach a bit. Trees could be added to protect 16 tee from errant shots. The left greenside bunker should be removed, and a fairway collection area created. Drainage should also be installed to take water from the left green complex to the east.



### Hole #3

The first bunker should be removed and fairway shifted over per the Hills/Forrest plan. This will provide an easier approach for the less skilled player. The remaining bunkers should be rebuilt according to the new style, and raised some if possible to ensure some sand is visible from the tee to help frame the hole.



#### Hole #4

The first fairway bunker should be reconstructed according to the HF plan. It will be moved some to the north to better challenge the longer hitter.

The second fairway bunker should be removed and gentle swales created in its place.

The last fairway bunker quite possibly is the best placed bunker on the golf course. It should be shortened a bit to create an area for its drainage and kept in the middle to preserve the strategy of the hole.



### Hole #5

The right fairway bunker should remain on the right side of the fairway, as it is important to the safety of this congested area. It should, however, be shifted 10 yards further south to better challenge longer hitters. The fairway can be extended and widened a bit to compensate for the bunker change.

The greenside bunker complex should be eliminated and replaced with a single bunker closer to left front of the green that will challenge the better player and still offer a fair recovery shot. Gentle swales and mounding left of the green will add character and a variety of shot making opportunities while improving traffic wear and drainage in this area.



### Hole #6

The existing fairway bunker should be reconstructed according to the new style, but moved about 15 yards further north to better challenge longer hitters. Fairway can be expanded to compensate for the move which will improve the landing area for the average player.

The left greenside bunker should be removed and a grass swale installed to keep some degree of challenge to the complex, but better allow some area for cart/maintenance traffic and proper turf conditions. The right greenside bunker should be repositioned to guard the right side hole location. This change will reward tee shots that challenged the tree lined left side of the fairway.






### Hole #7

The first fairway bunker should be reduced in size and rebuilt in that location. Fairway can be extended to compensate for the change.

The middle complex of fairway bunkers should remain similar in scope as far as linear orientation, but combined into 2 bunkers. We also suggest extending the fairway on the left into the area of the removed bunker to create a slightly shorter 3rd shot (78 yards to the green compared to current 97).

The left greenside bunker should be combined into one bunker, and constructed in the same location, as should the right greenside bunker.





### Hole #8

The greenside bunkers should be rebuilt according to the new style. The left greenside bunker could be extended forward some to better protect pin locations on that area of the green, while the right bunker can be reduced in size to allow for better cart traffic along that area of the hole.



### Hole #9

We suggest the greenside bunker be removed and approach widened. Bunkers on steep hillsides are difficult to construct, and usually offer a very difficult recovery shot. Because of this steep hillside and the angle of the shot, plugged lies in the bank and sand can be common. Bunker placement close to this green will create a steep grass bank and guarantee run off erosion similar to 18 green. Moving the bunker farther from the green will create longer shots with a full swing towards the dangerous clubhouse area.

The approach shots over the current bunker for the better players hitting wedges offers little challenge. For the average player, who may be hitting a mid iron approach, it is nearly impossible to fly this bunker with a lower trajectory and keep the shot on the green. In addition, the slope on #9 green has become so severe that it is a difficult par even without a bunker. Gentle swales as a replacement will keep some character and difficulty in a recovery shot.





### Hole #10

The fairway bunkers should be reconstructed into one single bunker, and shaped to divert water onto either side of it down towards CR 21. This would still allow for a great aiming point off of the tee, while shedding water away from the bunker and green complexes. The greenside bunker should be removed and a swale created to capture balls from crossing CR 21.



### Hole #11

Rebuilding the greenside bunkers is quite necessary. We suggest two bunkers for the right side, moved a bit closer to the green and eliminating the south end of the current bunker there. The left greenside bunker should be rebuilt a bit smaller and closer to the green.

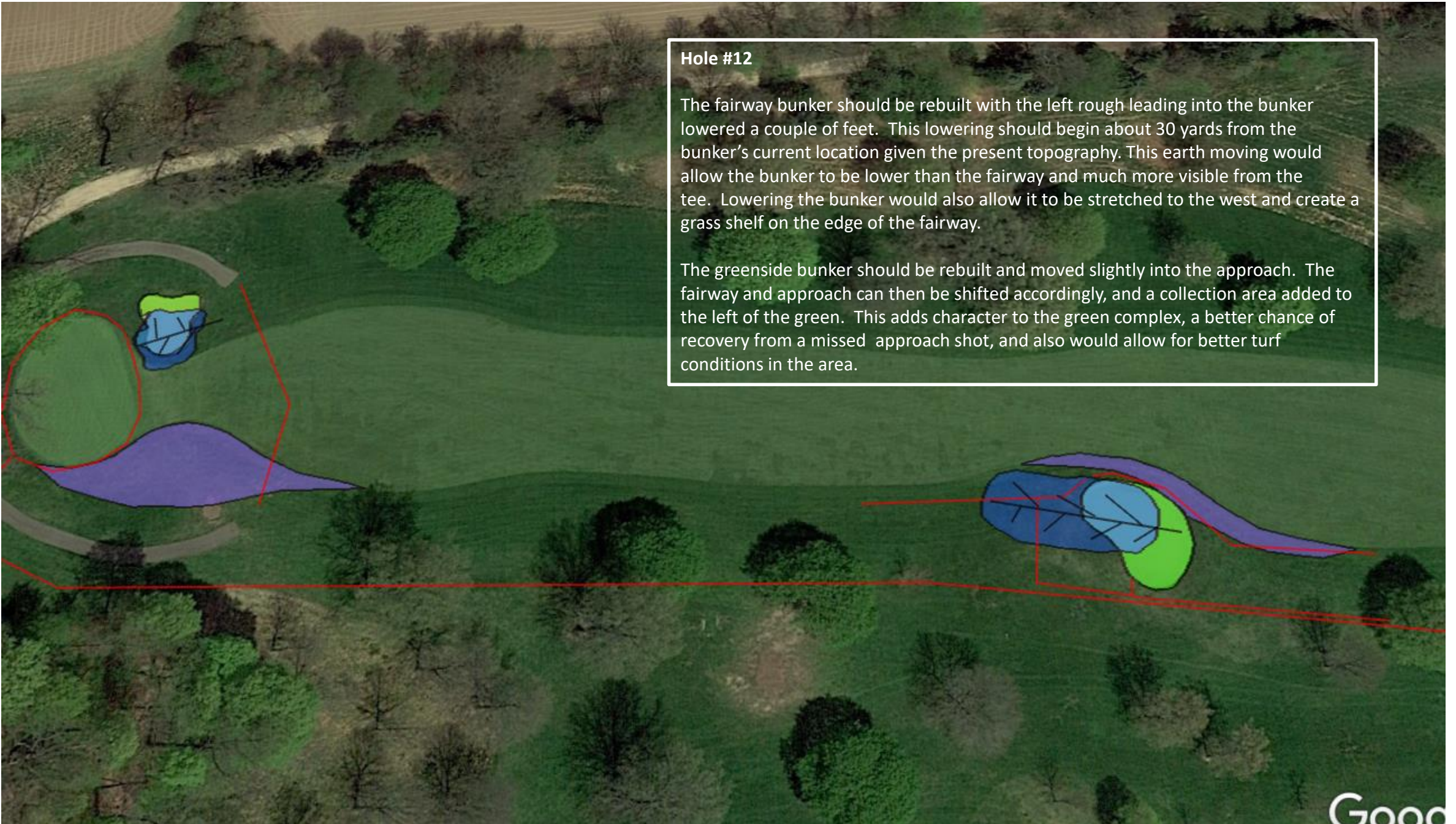




### Hole #12

The fairway bunker should be rebuilt with the left rough leading into the bunker lowered a couple of feet. This lowering should begin about 30 yards from the bunker's current location given the present topography. This earth moving would allow the bunker to be lower than the fairway and much more visible from the tee. Lowering the bunker would also allow it to be stretched to the west and create a grass shelf on the edge of the fairway.

The greenside bunker should be rebuilt and moved slightly into the approach. The fairway and approach can then be shifted accordingly, and a collection area added to the left of the green. This adds character to the green complex, a better chance of recovery from a missed approach shot, and also would allow for better turf conditions in the area.





### Hole #13


The right 2 greenside bunkers should be rebuilt into one single bunker to allow for easier maintenance and foot traffic in the back area of the green complex. The left 2 greenside bunkers should be combined and hug closer to the approach to allow for better turf conditions on the left side of the complex.



#### Hole #14

All bunkers should be reconstructed in their current locations according to the new style. The back right greenside bunker should be eliminated to create a better avenue of relief from drainage and foot/machine traffic.



An aerial photograph of a golf course. A red line outlines a specific area in the center-right of the image. Within this area, there are several trees and a small cluster of colored shapes (purple, green, and blue) near the bottom. To the left of the red boundary is a large, dark, irregularly shaped pond. Further left, a multi-lane highway runs diagonally across the frame. The text box is located in the upper right quadrant, containing the title 'Hole #15' and a statement about proposed changes.

### Hole #15

No additions or changes are proposed on #15 at this time.






### Hole #16

This hole was specifically changed into its current design by Art Hills. The fairway bunker was intentionally made into a larger bunker to intimidate players and force them to bail right. The south half of the fairway bunker can be eliminated because it is not visible from the tee. The remaining portion of the bunker can be reconstructed and lengthen a bit to better challenge the longer hitters, while keeping the strategy of the hole. The small mound located on the front third of this remaining bunker will be lowered to make the bunker more visible from the tee.

The greenside complex is the most beautiful and challenging on the golf course, and all bunkers should be rebuilt in their current locations.




An aerial photograph of a golf course with several design overlays. A red line outlines a large area on the left side of the image, which includes a green and two bunkers. Another red line outlines a large area on the right side, which includes a green and a large bunker. The bunkers are colored in blue and green, and the greens are colored in green. The background is a lush green landscape with trees and grass.

### Hole #17

The north half of the fairway bunker should be removed and fairway extended to compensate the change, as suggested below. The south end of this bunker should be pushed a little closer to the green to challenge the longer hitters.

The left greenside bunker should stay in its relative current position, however it should be carved a bit closer to the green. The right greenside bunker should be narrowed some so it is closer to the green and shifted a bit south to better protect back pin locations.




An aerial photograph of a golf course. Red lines are drawn on the image to delineate specific areas, including a large rectangular area in the upper left and a smaller area around a green in the lower right. Blue water features, likely ponds or streams, are visible in the upper left and middle right. The terrain is green with scattered trees. A building is visible in the bottom right corner.

### Hole #18

We have several reservations regarding the HF plan for removing trees between 10 and 18, as these trees provide safety from errant tee shots off of 10. The fairway bunker HF proposed would also provide quite the challenging bunker shot into an already difficult approach with the clubhouse as a back drop. We simply suggest the greenside bunker be rebuilt in its current location to address drainage and settling issues that have come about since its construction in 2014.



An aerial photograph of a golf course. In the center-left, there are two circular green fairways. To the right of these, a red line forms a triangular boundary. Inside this boundary, there are two bunkers. The upper bunker is blue with a green outline and a black crosshair. The lower bunker is green with a blue outline and a black crosshair. The surrounding area is a mix of green grass and brown, leafless trees.

### Practice Facility

The bunker in the short game area could remain in its current location and rebuilt into the new style. The bunker at the practice tee should be shortened to the western half and rebuilt. Irrigation will have to be added to the north to compensate for the increased turf area.