3 Life Lessons from a Major Golf Course Renovation on an Existing Landfill

Illinois Association of Floodplain and Stormwater Management Annual Conference 2023

March 15, 2023









Location







Master Plan









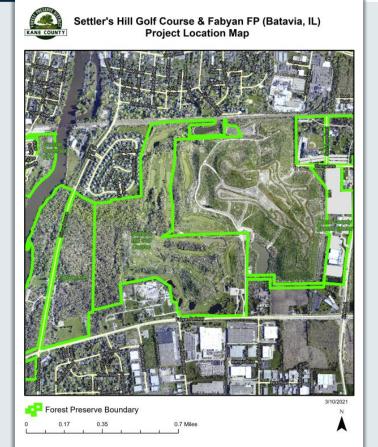
Ownership



Settler's Hill Golf Course Aerial Map (July 2021)









History









History



- Started as 9 Hole Golf Course
- Additional 9 Holes Built
- 27 Holes of golf proposed
- No disturbance to the surface of landfill allowed
- One-of-a-kind golf course
- Waste Management Signature Golf Course
- 2006 Settler's Hill Landfill Closed
- Methane gas used to power some of City of Geneva residents





Team



- Forest Preserve District of Kane County
- County of Kane
- Waste Management, Inc. of Illinois
- Martin Design Golf
- Weaver Consultants Group
- Wadsworth Golf Construction Company
- ESM Civil Solutions, LLC.
- Engineering Resource Associates

















ssues



- Aged Golf Course
- Midway Landfill
- Settler's Hill Landfill
- Methane Gas
- Power Plant
- Infiltration
- Leachate Collection & Treatment
- Golf Course Built on Landfill

COURSE SLOPES 127 122

120







COURSE RATING White 70.4 Gold

69.7

Red

							_				2-1000													_
HOLE NUMBER	1	2	3	4	5	6	7	8	9	оит	HOLE	10	11	12	13	14	15	16	17	18	IN	тот	нср	NET
BLUE COURSE	337	365	471	141	355	488	205	389	540	3291		407										6630		
WHITE COURSE	317	353	404	123	335	479	156	382	526	3075	WHITE	399	523	424	142	309	349	160	525	317	3148	6223		
GOLD COURSE	299	343	383	116	304	470	134	375	473	2897	GOLD	375	465	392	122	289	307	149	481	302	2882	5779		
PAR	4	4	4	3	4	5	3	4	5	36	PAR	4	5	4	3	4	4	3	5		36	72		
HANDICAP	15	11	1	17	7	5	13	9	3		HDCP	6	4	2	16	18	14	12	8	10				
																								Ц
	L						L	L					L			L								Ц
		L											L											Ц
	L	L														L								Ц
PAR	4	4	4	3	4	5	3	4	5	36	PAR	4	5	4	3	4	4	3	5	4	36	72		
RED COURSE	283	296	317	107	263	404	108	250	415	2443	RED	340	388	357	92	263	281	112	407	262	2502	4945		
Scorer:											Attest:										Date	9:		



Mission





Settler's Hill Golf Course

Mission:

Improve Settler's Hill Golf Course to be more economically viable, environmentally sustainable, operationally efficient and recreationally purposeful.

Improve the economic viability of the golf course

- . Expand the target market
- · Improve playability and enjoyment
- · Improve and update the infrastructure
- · Create a more user-friendly (pre-golf and post-golf) product
- . Improve or expand interior and exterior views of the property
- · Improve banquet and food service opportunities

Improve landscape function and expand natural habitat

- · Locate areas to expand natural habitat
- · Devise sustainable maintenance practices
- . Better integrate natural areas and natural resources into the golf experience
- Generate educational opportunities

Improve the recreational opportunities at Settler's Hill G.C.

- · Attract a wider target market
- · Introduce a junior course
- · Introduce a full golfer practice range
- · Expand clubhouse use opportunities
- . Expand educational opportunities on the golf course and in the clubhouse areas

New Features

- Practice Range & Practice Green
- Junior Course
- . Redesign for holes 6, 15 and 16



Updated 9/22/2022







Goals



- Improve Surface Drainage
- Expand Subsurface Drainage
- Advanced Irrigation System
- New Irrigation Pump Station & Water Supply
- Minimize Restricted Play
- Enlarge Natural Areas
- Replace Paths
- Replace Bridges
- Returning 9's

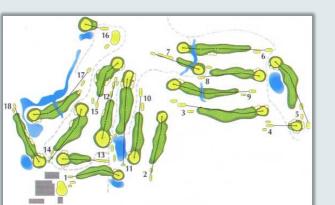




Life Lesson #1



Know the History, Know the Site,

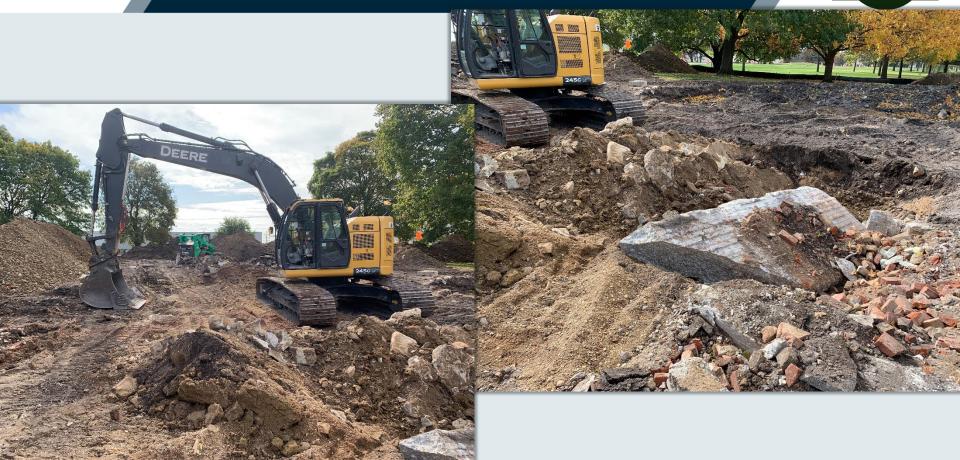


Know the Goals!



Demolition







Damaged Infrastructure







Bad Days







Big Friend







Tees







Fairways







Greens

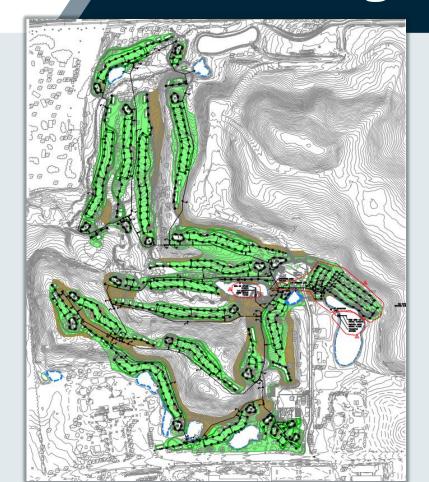


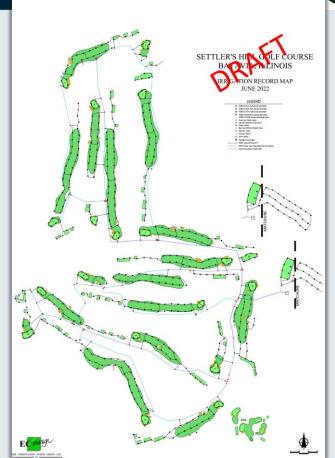




Irrigation









Irrigation







Water Supply Drama







Water Supply







Soil Erosion & Sediment Control







Bridge Replacement







Paths







Youth Golf







Driving Range



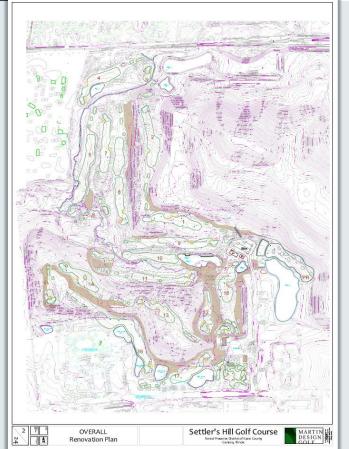




Environmental Upgrades









Mass Grading







Final Seeding







Final Seeding







Grow In









Grow-In







Grow In







Hole 1







Grow In







March 2022







August 2022







Life Lesson #2



No Construction Observation, No Quality Control!



Existing Clubhouse







Future Clubhouse







Southwest View







Northwest View







North View







Funding & Cost



Too Little, Too Much!



Life Lesson #3



See Big Picture, See Success!



The End





"Plans fail for lack of counsel but with many advisers they succeed."

Proverbs 15:22

Kenneth N. Anderson, Jr.
Engineering Resource Associates
Office: 630-393-3060
Mobile: 630-803-9220
kanderson@eraconsultants.com