

# PROJECT PARAMETERS

Builders discuss the differences between renovation and new construction, along with the importance of grow-ins **By John Walsh**

**E**ditor's note: During this year's annual summer meeting of the Golf Course Builders Association of America, which was in Monterey, Calif., Golf Course Industry hosted a roundtable with six GCBA members to discuss the golf course development industry. Participants were Glenn Caverly, president of Golf Course Construction in Howell, Mich.; Bob Bryant, president of Bryant Taylor Gordon Golf in Costa Mesa, Calif.; Oscar Rodriguez, vice president of Weitz Golf International in Temecula, Calif.; Klaus Ahlers, golf sales manager with Colton, Calif.-based Leemco; Wayne Massey, president of Medalist Golf in Cumming, Ga.; and Willie Slingerland, sales manager for Dallas-based Flowtronics. The following is an excerpt of the discussion.

**GCI:** What are your thoughts about renovation?

**AHLERS:** It has been – except for all the stuff we ship overseas – our biggest business during the past two years. A lot of it is because of water quality changes, the modernization of equipment, the fertilizer injector systems, as well as rebuilding bunkers, greens and tees. On many courses, that's been the bulk of the work.

**SLINGERLAND:** That's the majority of our work domestically. Internationally, it's all new construction.

**CAVERLY:** I don't believe renovation has picked

up any. We've done as much renovation work as when the big golf boom was on.

**GCI:** Is that regionally or throughout the country?

**CAVERLY:** There are no more renovations now than there have ever been. It's the only thing that's keeping the industry going.

**BRYANT:** In certain parts of the country, renovation has picked up. For example, 10 years ago, if we did a project that involved replacing an irrigation system, that's exactly what the project was – we designed an irrigation system. Sometimes, six months later or two years later, the owners decided to do a bunker project. Well, they've started getting a little smarter about planning. Today, with almost every project we're involved in replacing an irrigation system, it involves some form of reconstruction. El Paso Country Club in Sacramento was a complete blowup and start over. They completely rerouted the golf course. That's an extreme.

**MASSEY:** In the Southeast during the past two years, we've seen projects increase to 70 percent new construction and 30 percent renovation. All new construction is basically very high-end.

**RODRIGUEZ:** What I liked about renovations is that most of the time they've been budgeted, either privately funded or publicly if it's a city or county. So when you go in there, you know you're going to get paid most of the time. We don't start

until funding is in place. And it's already a running facility, so you know the chances the funds are going to be there for you are high.

**SLINGERLAND:** Plus you know what you've got to start with. There's not a lot of surprises.

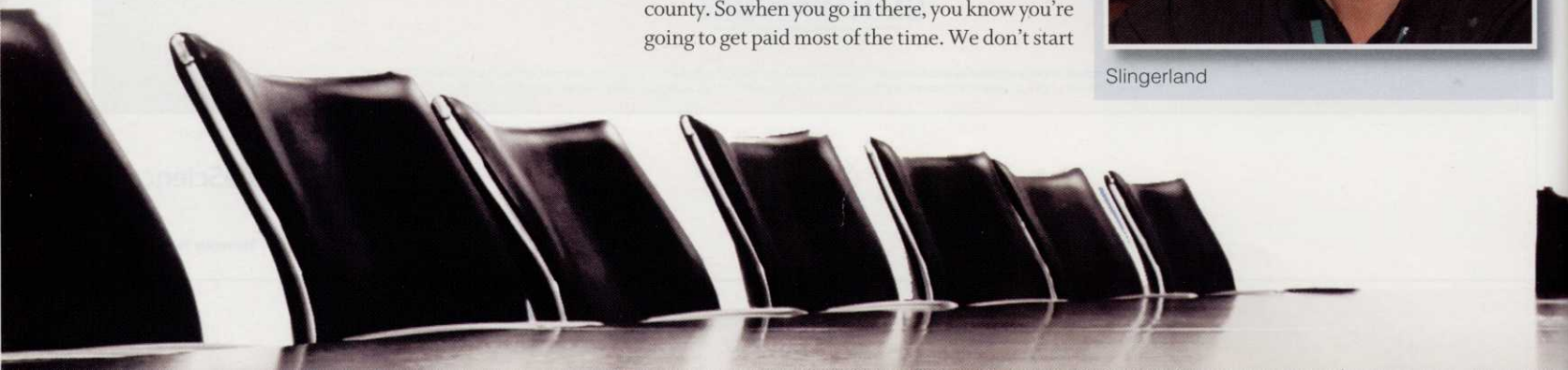
**BRYANT:** Going back to the team concept, we're involved in a major renovation with a top 100 course in Southern California that has a long-term planning group. There are intelligent people involved. They're budgeting, they have the architect involved, they have the agronomist involved. I predict it's going to be a very successful project. They're going to control their costs.

**GCI:** Would you attribute that successful planning to architects' push for master plans?

**BRYANT:** That's starting to help. I'd like to think the Golf Course Builders Association also has helped with communication. In general, there's



Slingerland





Bryant

more information available to new developers than there has been during the past 10 to 15 years. There are conferences, our conference, our Web site, and obviously, the electronic age makes information more available. Sophisticated builders, not golf course builders, but developers, especially of housing, have access to the information. They just have to go find it. The architects are helping. Not all of them understand yet, but the majority of them do.

**AHLERS:** Regarding the renovation thing, many courses say, 'OK, hold on. We're going to do this next year.' It's not a money thing. Sometimes they've already acquired all the funding. They don't have a model home opening and aren't trying to get their money back from this investment and the property. They do the master plan, get budgets, think it out, and just say countless times, "Hold it, we're going to wait. We're going to do this next year because we don't want to lose the season. It's a big investment for us, and we'll be OK one more year or season.' Those are the kind of jobs ... I've never seen anything work out better. The planning's great. The people know exactly what they want. You make a couple bucks on it, too, because you don't have a lot of issues.

**GCI:** Do you treat renovation and new construction projects differently?

**RODRIGUEZ:** You have to be more versatile with your people. Even though all this planning takes place, at the end of the day when you start opening things up, who knows what's underneath.

We have a few crews that do self-performed irrigation. We should put those crews on the renovation projects. If I bring in a subcontractor, I have to go through the change-order process and documentation. If you're self-performing, you can almost ad lib about those circumstances, working with a committee or the superintendent. Sometimes you don't have time to go through those channels and just have to make it work.

**BRYANT:** It absolutely requires a different crew for irrigation. The crew who does that work needs to understand several things. One is that we have to maintain the old irrigation system. It has to remain in service, especially if we're not blowing up the entire golf course. They also need to understand how to take the sod up, get the pipe in the ground and get the sod back, so there's the least amount of disruption to those areas that aren't involved in the renovation. They also need to understand the members because many of these renovations are done with the members still playing on parts of the golf course. They need to understand the courtesy that's required for these members.

**AHLERS:** I remember years ago starting to see the dust control, then the erosion control and now the storm water management program. I remember at first I thought, 'What's with these bails of hay? Why do I need bails of hay on a golf course? I never saw that.' It must be getting bigger and more expensive all the time.

**CAVERLY:** We used to bid jobs, and those items were treated as incidentals, and now every one of those items you just mentioned has a dollar value to it. And those costs are anywhere from \$100,000 to \$1 million. Soil erosion and storm water protection alone. We used to build a golf course for \$1 million. Today, storm water management can be \$1 million.

**RODRIGUEZ:** We're working in Palm Springs, and we have what's called a PM10, and all that is grouped together. It easily could be \$2 million.

**SLINGERLAND:** In the Carolinas and certain parts of the country, they'll only let you disturb, four to 15 acres, and you have to have that grassed with 75-percent coverage before you can disturb the next four to 15 acres.

**BRYANT:** In Hawaii, it's five acres.

**AHLERS:** I thought that job in North Carolina was ridiculous at 25 acres at a time. How do you build a golf course like that? And you're saying five acres!

**BRYANT:** As with most things, there are certain rules that apply. It's not like you have to open and finish five before you move on to the other five. They're guidelines. Essentially, you're not supposed to be disturbing or involving more than five acres at a time.

**AHLERS:** And that's what this 25 was. You did 25, and you got that regressed and covered, and they sodded it.

**CAVERLY:** We're on one right now that has a 30-acre work limit. And back to driving costs, we have a lot of idle equipment. We shut down the earth-moving operation to go back and stabilize. And we have to stabilize before we go to the next section.

**AHLERS:** Weren't the irrigation guys waiting to start on the next thing?

**CAVERLY:** That's exactly what happens. I mean, we're in a typical situation where there's a timeline on the project, but nobody wants to acknowledge these things when they make that timeline. These things all drive up costs.

**GCI:** One issue seems to be exactly when a builder is finished with the work and when the responsibility shifts from the builder to the superintendent or owner.



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## COURSE CONSTRUCTION



Caverly

**CAVERLY:** I'm into one right now in which the owners believe that when the golf course is ready to open it's theirs. The architect specs have always been my pet peeve. When the seed hits the ground, it's the owner's. For maintenance and watering purposes, however, they always put that line in there that says the contractor has to guarantee germination. It's difficult for us to guarantee germination when we're not in control of doing the grow-

in of the property. And if we have a superintendent that's not doing the proper grow-in, we don't get our retainage, and we have to go back and regrass. It's a big problem area. The grow-in is the biggest thing on the golf course, and it's neglected. They don't want to hire a superintendent until they have to, and we as contractors don't want to have to do the grow-in – not unless there's a line item bid for it.

**GCI:** So parameters aren't being defined clearly?

**RODRIGUEZ:** It becomes a gray area when you bring in germination. In most of what I go through, the gray area is a little different because it's really not when to seed or when sod goes down, but when you're irrigate it automatically. Most contracts are worded that if you use irrigation system to water an area, then the superintendent or owner takes over. The problem with that is that most people interpret that as an entire, complete golf hole. And how many times do we have to start here and end up on the same golf hole to complete the 18? We go with where we can. It could be environmental. It could be all kinds of things that are beyond our control that we have to piece out this golf course, and we can't turn it over hole by hole.

Now that's where the gray area is, but something that makes a golf course a lot better is the quality of the grow-in superintendent. I could name a few: Virgil Robinson, Earl Sanders, Scott Lewis.

There are some people in the industry that take what we give them and can't wait to get rid of us and say, 'We love you guys, but get out of here. You're done, let me take it.' And they take it to the next level and do an excellent job. Then you get the rookie that keeps bringing you back, and now you're arguing about whether it's erosion, overwatering or whatever the reason might be, but that golf course doesn't get to the next level. It gets even worse sometimes.



Rodriguez

**CAVERLY:** We've tried to work with Michigan State University for years, and maybe right there's where the problem starts – the superintendents go through the turf program, and they believe because they have a degree in turfgrass management, they know how to do a grow-in. A grow-in is a completely different animal than maintaining existing turf. That education needs to be emphasized.

**SLINGERLAND:** Grow-in takes experience. It's nothing you can learn in a classroom. It's nothing you can learn until after you've done it. And it's not just once.

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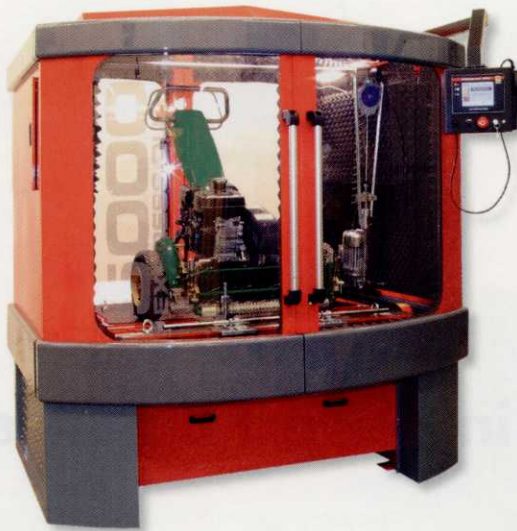
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## COURSE CONSTRUCTION



Masey

**GCI:** How many projects have you worked on that had a grow-in superintendent?

**BRYANT:** It goes back to the architect. There are architects that insist on a qualified grow-in superintendent.

**MASSEY:** There's always that planning, that team concept that starts early in the project.

We offer an internship with agronomists who are getting ready to graduate. It's amazing how few of those guys we see. There should be more of those guys out there learning how to build the green from the bottom up. Build sand bunkers, learn how to build irrigation, do all this from the bottom and then go back to school for another year or two and then get out. We're lucky to see three, four, five guys a year coming into these internships to work.

**CAVERLY:** One of the things I see about irrigation on every job is that if an irrigation designer designs a green with two-inch pipe around it, the first thing a superintendent wants to do is put topdressing or fertilizer down and turn on every head on that green at the same time and stress that pipe out. They think they know irrigation. All they know is how to push the button and make water come out. And I always say, 'Your designer would've designed it that way if you would've told him what you wanted.' But there's a misuse of things.

**BRYANT:** It's abused more on the fairway because they can turn on more heads. We would have to design four-inch laterals to turn on all the water they want to turn on. And they don't need to do that. With a proper grow-in process, they can schedule irrigation on the satellite without a central or with a central if it's available. They can schedule an irrigation without violating the hydraulics of the system. It just gets back to having an educated person do that.

Years ago, I was asked what was the most challenging problem facing irrigation in the future, and I said one of them was the education of the superintendents. Of all of the programs I've seen and all of the textbooks I've ever seen published that are used in major schools, none of them are current. They all go back to the late '60s and '70s in terms of irrigation technology. That's frustrating, and I don't know why the major manufacturers haven't made more effort to reach out to these universities to provide more education.

**SLINGERLAND:** I've been asked to talk at Texas Tech and Texas A&M, and I bet they spend less than 2 percent of the entire degree time talking about irrigation. And nowadays, it's one of the largest line items in a bid. It's nothing to see a \$2- to \$4-million dollar irrigation system these days.

**BRYANT:** It's not just to water the grass. An irrigation system is a long-term maintenance tool for the health of the grass and soil.

**SLINGERLAND:** It's maintenance of that system, too. They don't even teach that. Obviously, I'm in the pump business. I tell people that when I walk into some pump houses and pump stations that are a year old, they look like they've been there for years. **GCI**

# how sweet it is

In Michigan's Upper Peninsula, golfers might find themselves examining their concept of normal.

In Harris, Mich., the Hannahville Band of the Potawatomi Nation is building a new golf course as part of the "natural evolution" of its 22-year-old Island Resort & Casino. That's normal for casino resorts nowadays, but that might be where the comparisons end – designwise, constructionwise and financewise.

Through a fortune willed to the tribe by an outsider, Sweetgrass Golf Club is being built without borrowing any money, according to Tony Mancilla, council chairman of the Hannahville Indian Community. As important as that is, and as much as Mancilla promises they will hold the line on the cost of a round of golf, it's only one of the project's facets that sets it apart from the norm.

Normally, an architect won't identify any one of his creations as his best. But, Paul Albanese of Plymouth, Mich., says this is by far the best golf course he has designed.

Typically, courses in the U.P. consist of about 150 acres and are heavily forested, commanding golfers to be precise with their drives. But Sweetgrass consists of 320 acres of mostly open farm fields and mildly undulating hills, with only a handful of holes meandering through trees. Because of this, Albanese was able to create a layout that makes it difficult to lose balls when playing.

Normally, views of lakes or mountains outside a course are a drawing card. At Sweetgrass, the best views are the features the development team created, such as an island green and the waterfalls between the ninth and 18th greens, Albanese says.

Typically, 100-year-old, one-car iron bridges dot the highways of Michigan. At Sweetgrass, five of them will carry golf cars to the island green or over wetlands and creeks.

At Sweetgrass, native lore is written on scorecards and stretches out before the golfer on every hole, such as the fifth, which tells the legend of the serpent and the great flood, and the 18th, which depicts the story of the seven grandfathers.

Generally, those in the industry can make three educated guesses to determine the type of irrigation system installed on a new golf course. At Sweetgrass, the first-ever John Deere-manufactured Aurora Decoder System was installed.

Normally, if a golf facility contains a continuous flame, it's in the grill. At Sweetgrass, a flame is kept burning constantly in a firepot on the 10th tee box to mark the fact that the Hannahville Band of the Potawatomi Nation are known as keepers of the fire.

The golf course, which has been grassed, is expected to open in July.

#### CONTINUED GROWTH

Even though the golf course was a natural evolu-

tion for the resort, the tribe conducted a market study for the \$4-million to \$5-million project, Mancilla says.

"We did it for the bank and so the tribal council would feel comfortable," he says. "One of the studies said a golf course would be a big draw if done well, and that's what we intended. In every one of the market studies for previous expansions, we've always exceeded expectations."

The estate was left to the tribe by Zoe Bra-zowski, who had visited the reservation when she was a young girl in the 1930s, so the Hannahville Band was able to self-finance the golf course, Mancilla says. Since the casino opened in a pole barn in 1985, the tribe has managed the entire operation, overseeing construction of a small casino with 40 slot machines and 28 guestrooms in 1991; the addition of a convention center, 113 guestrooms and 860 slots in 1997; and the addition of 225 guestrooms and another 600 slots this year. Currently, the resort features 330 guestrooms, 1,500 slots and a convention center that holds about 400 people.

The tribe was confident it could build the golf course on its own, Mancilla says. The tribe used its own construction company moved the bulk of the dirt for the golf course, saving half the cost of such a job.

#### ROCK WORK

Aside from the heavy earth-moving, Grassi Enterprises of Howell, Mich., handled the construc-

# Native American tribe differentiates its new course from others in Michigan's Upper Peninsula

BY MARK LESLIE



The \$4- to \$5-million Sweetgrass Golf Club was built without borrowing any money, according to the council chairman of the Hannahville Indian Community. Photo: EPIC Creative

tion, including one project that owner Dan Grassi says he'll never do again – chiseling about 10 feet of ledge rock to create a waterfall and 10-acre water feature. Afraid of using dynamite because it could cause fissures in the ledge rock leading to leaks in the ponds, Grassi and partner Dana Morrow used excavators with three jackhammers to do the job, which took two months. Grassi and Morrow used the rock from the excavation to create 200 feet of waterfalls that cascade down from the double-green at the ninth and 18th holes and between the two fairways and settle in three ponds along the way. From there, the water flows into a creek that runs through the golf course.

#### BETTER DIRT

The other considerable challenge for Grassi was compensating for the heavy clay soils throughout much of the property. While creating mounding, bunkers and other features, Grassi also was able to use the clay to line the several ponds that were built. But still, they needed to cap the clay with soil on which a golf course could be built. Albanese's design called for all-sand California greens, and the tees needed to be sandcapped before they could be laser-leveled to promote drainage. When a 10-acre parking lot was built, Grassi used the soil from that project to build features and elevate greens and tees. Another soil source was the earth around about 30 acres of trees that were logged.

"We weren't allowed to burn," Grassi says. "A

logger did the logging, and we did the stumping. Then we took an excavator and shook out the topsoil and loaded it into trucks to a pit for later use."

The stumps were used as fill.

#### NEW PLUMBING

Meanwhile, Grassi chose to be the first to install John Deere's new Aurora Decoder irrigation system, a two-wire system that includes more than 1,000 irrigation heads and almost 22 miles of pipe.

"Installation went 30-percent to 40-percent faster than a conventional irrigation system because you use fewer wires," Grassi says. "Typically, you irrigate a hole every couple days. We were able to get it down to a day, day and a half per hole. You use a lot less copper and run a lot less wire."

With the two-wire system, golf course superintendent John Holberton has individual head control, is able to operate it from a cell phone or computer, and, if he wants to add a head, can just run a piece of pipe and connect the wire to one of the nearest heads, not all the way back to the controller. That's good because Holberton, who joined the project in July 2006 after the irrigation choice was made, is adding more heads and might exceed more than 1,100 by the time he's done.

"Seeding lines exceeded irrigation," he says. "The wind blows every day, sometimes so hard that you only get water in one direction."



### AT A GLANCE Sweetgrass Golf Club

**Location:** Harris, Mich.  
**Type of project:** New construction  
**Cost:** Between \$4 million and \$5 million  
**Construction start:** August 2005  
**Construction end:** October 2007  
**Course opening:** July 2008  
**Owner:** Hannahville Indian Community  
**Architect:** Paul Albanese  
**Builder:** Grassi Enterprises  
**Superintendent:** John Holberton  
**Turfgrass:** L-93 bentgrass on the greens and fairways; a mix of L-93 and Southshore on the tees; hard and sheep fescues in rough

#### A COURSE APART

Meanwhile, Albanese has been busy creating a course he believes will be different than any other in the Upper Peninsula.

"We tried to minimize forced carries and make it exceptionally playable because there will be a lot of high-handicap golfers; yet, you could have a PGA Tour event here from the back tees without question," he says. "We tried to create a golf course where you can have as much risk-and-reward challenge as you want. From the back tees, if you take the risky route, you can run into quite a bit of penalty. But if you deal with it effectively, if you get over the correct bunkers at the right spot, you will be amply rewarded. But all day long, you can bail out and make bogey; you're not going to make double-bogey. That's the essence of a good design. You won't be overly penalized."

Mancilla, an avid golfer, agrees Sweetgrass is a special golf course.

"It's different than anything you will see in this area," he says. "People are used to tree-lined courses in the Upper Peninsula. The difficulty is getting down the fairway and keeping your ball in play. That's not the case here. A lot of the Upper Peninsula courses aren't that long. You're never hitting over a 7-iron into a par-4. Here, you will play every club in your bag, and that sets it apart for me."

Sweetgrass is the first course to feature John Deere's new Aurora Decoder irrigation system. Photo: EPIC Creative

“As a golf course contractor, you always feel one or two holes were left out, but the land here was so aesthetically pleasing and with Paul’s routing, we’ve got 18 great ones,” says Grassi, who has built a couple dozen courses during the past 26 years. “It seems that on every hole you’re on your own private hole.”

Aside from a sound design strategy, Albanese wanted to incorporate another aspect that would create interest beyond golf – something unique to the tribe and the Potawatomi Nation.

“We wanted to reflect native culture and tribal heritage, so we started to look at the native stories and legends as a way that we could incorporate them into the design,” he says. “We wanted the overall earth-moving and grading to blend in to what was already there. It doesn’t look artificial, out of place or over the top. When you look at that bunkering, you think, ‘Wow! That’s visually dynamic.’ But there’s a story behind it, a genesis that comes from a tribal legend or story.”

On some holes, seeing the legend is like discerning an animal in the clouds, such as the Sacred Deer hole where a gigantic waste bunker across the fairway resembles a deer. On the Serpent and the Great Flood hole, a serpentine bunker curls down to the edge of a two-acre pond that represents the flood. Seven pot bunkers symbolize the seven grandfathers in another legend. Redan means fortress or fort in French, so Albanese designed a Redan-style green on the

Michigami (Native American for “fort”) hole.

#### OVER THE WATER

More visible to everyone will be the bridges. Tribal administrator Pat Groleau discovered the Michigan Department of Transportation was selling a historic one-car bridge for scrap metal. It happened that Albanese and Grassi were discussing the island green on the 15th hole, and a typical land bridge was planned because they didn’t want to build a bridge. A cost analysis led to experimenting with a 104-foot-long iron bridge built in 1915. The bridge was disassembled, moved to the property, restored and reassembled at the island green. It looked so good, the Hannahville Indian Community bought four more, Mancilla says. The shortest is 50-feet long, and they all match, partly because they were built within 10 years of each other.

“It took a little more time and money than we anticipated, but those bridges have added a lot to the course,” Mancilla says.

#### FRESH GRASS

Holberton, a Class A superintendent who came to Sweetgrass from Wild Bluff Golf Club in Brimley, Mich., has overseen a difficult grow-in period. Intense heat and only two-tenths of an inch of rain during 2.5 months caused concern and a lot of extra watering – so much so that Holberton had to make fungicide applications

to halt diseases. But now the rains have fallen, his crews are mowing all but two fairways, and the opening is in sight.

L-93 bentgrass was chosen for the greens and fairways, while a mix of L-93 and Southshore was used on the tees. A large area of bluegrass stands between the fairways and secondary rough, where hard and sheep fescues will create a wispy, Scottish look. And the sweetgrass?

“It’s all around the course,” Mancilla says. “Sweetgrass is burned before any tribal meeting. It clears your mind. We thought, ‘For golf, what could be a more perfect thing?’ You can’t have bad thoughts in your head when you golf. It naturally fit. Plus, it has a wonderful smell.”

The tribe hopes that translates into the smell of success. **GCI**

*Mark Leslie is a freelance writer based in Monmouth, Maine. He can be reached at gripfast@adelphia.net.*

The all-sand California greens were grassed with L-93 bentgrass. Photo: EPIC Creative



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