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Pat Fuscoe, engineer

Pat Fuscoe plans to engineer the Great Park from the ground up.

By SONYA SMITH
The Orange County Register
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As a young boy, he'd stroll out into the wilds where ranches were scattered over the land and peacocks roamed.

Pat Fuscoe could catch anything – tadpoles, fish, baby rabbits. He'd crawl on his belly through the fields, hiding from ranchers. They hated his intrusions, so they'd shoot at him with rock salt loaded in rifles.

He lived on the edge of the area's wilderness, growing up in Los Angeles near the Palos Verdes Peninsula.

For more than 20 years, he has led his own Irvine firm, Fuscoe Engineering, a company that always tries to stay green. And recently Fuscoe has been working with designer Ken Smith on the Great Park, which will be one of the largest urban parks in the world.

His face lights up with a smile when he talks about the project, a chance for him to connect nature with development, public with private.

Now he's determined to give the park's visitors a taste of what he enjoyed as a child.

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Fuscoe was the first in his family to go to college, paying his way through USC and learning a lot of life lessons.

To earn money he relied on something familiar to him – engineering. Growing up, his close family friend John Kirkpatrick, known to him as "Uncle Kirk," was always around – and his engineering profession rubbed off on Fuscoe.

Fuscoe remembers his first engineering tendencies. On family camping trips, he organized the campsites. He placed the families here or there. He built bridges over streams. He made woodpiles just so.

"I was just that sorta person," he said.

After school and during summers, Fuscoe talked his way into an engineering job for the city of Torrance designing residential swimming pools – even though he was still working on his engineering degree.

"I just figured that I could do it myself and started engineering things for people," Fuscoe said.

He graduated from USC in 1972 with a bachelor's degree in civil engineering.

He remembers graduation day well. With cap and gown still on, back at his Delts fraternity house, he got a call from a Palos Verdes developer asking him if he wanted an engineering job.

Fuscoe started the next day.

He worked for two years in Palos Verdes until he was overtaken by a desire to sail around the world. He quit his job and moved to Balboa Island, which would be the launching point for his grand adventure.

But the Irvine Co. caught him before he sailed off and offered him a job on a project called Woodbridge.

That's when he scrapped the sailing venture and his engineering career took off.

The Woodbridge project was considered bold. Rather than a collection of cookie-cutter homes, it was a "themed" village built in a former bean field. Fuscoe was given the task of creating a lake that would serve as the community's centerpiece.

He was told to "break the mold."

He built a small body of water that looked bigger than it actually was. Its asymmetrical shape made it look like there was always more lake hidden around the bend.

Fuscoe's next big project was near UC Santa Barbara, where a proposed shopping center was in jeopardy of being shelved because its design would have sent pollutants straight to the ocean.

In 1996, Fuscoe was hired to make it work. He came up with an idea for wetlands that would cleanse polluted water runoff on its way to the ocean.

That Santa Barbara idea worked, and he duplicated the idea all over Orange County, such as the wetlands behind the Hyatt Regency Hotel in Newport Beach and in the Seal Beach Hellman Ranch.

Fuscoe continued to grow his company. Today it has about 180 employees and dozens of projects scattered around Southern California.

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In 2002, a "Great" opportunity appeared.

The Millennium Park Plan was Fuscoe's lifelong dream come true. He saw it as development co-existing with nature. Just like Fuscoe remembered from his childhood.

Fuscoe has worked on the Great Park from the start, hired to merge nature with development, public with private, abstract with reality.

About three years later he met Ken Smith, who was vying to design the 1,347-acre park, and Fuscoe took him under his wing.

The two were instant friends. Smith is a designer who understands engineers, and Fuscoe is an engineer who understands designers.

Smith's draft of the park plan will be unveiled Thursday, and, whatever is finally approved, it will be Fuscoe's job to make Smith's "wave of the hand" ideas work.

The plan calls for a canyon. Fuscoe plans to take a 30-foot-deep ditch and build up berms to make it look 60 feet deep.

Fuscoe intends to uncover streams that have long been buried by the old military occupants.

He hopes to use the leftover concrete from old runways as the rocks that will guide a cascading waterfall.

Dirt and water will be moved and sculpted to create a natural habitat for wildlife moving through the park. It will keep the park visitors safe from the bunnies, squirrels and coyotes, and those animals safe from the visitors.

Trails for bicyclists, joggers and walkers will wind through the Lennar Corp. development and the Great Park – blurring the park's boundaries.

Recently, Smith called Fuscoe to share another idea.

"I was out looking at the hangars and I looked up and saw these beautiful redwood beams. How about we use these for the pedestrian bridges?"

Fuscoe says that most engineers would say no. They would call it impossible or too expensive.

"My reaction is, 'What a cool idea. I'll see if we can make it work. ... To get the Great Park you got to have that.' "

Smith jokingly calls Fuscoe "a civil engineer with a bent antenna."

If the Great Park is engineered right, Fuscoe said, people will never forget it.

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PUTTING IDEAS INTO PRACTICE: Engineer Pat Fuscoe is responsible for the energy and water systems that will go into the Great Park, and for turning the park designer's ideas into reality.

JEFFREY ANTENORE, THE ORANGE COUNTY REGISTER