

QL3.2 – Preserve views and local character.

Level of Achievement:

RESTORATIVE

Summary:

The site was a maintenance yard for buses and trolleys that sprawled a full city block, covered by more than nine acres of asphalt and concrete, encircled by a rusted chain-link fence and razor wire in the center of a blighted part of South Los Angeles. As documented in the EIR, the project site did not have any scenic vistas within or surrounding the site.

The main historical building was mothballed to preserve the site's historical character (reference QL3.1). The remaining blight buildings were demolished and the views from the neighboring school, church, and homes were improved. The project improved the overall visual character as it transformed all nine acres of the blight maintenance yard to landscaped public space for the community.

Supporting documentation:

- Graphic illustrating project setting and character
- Existing and proposed site plan exhibits
- Summary of Environmental Impacts and Mitigation Measures from Final EIR
- "Restoring a Link to Nature" article from Stormwater magazine

Graphic illustrating project setting and character

EXISTING SITE AND ADJACENT PROPERTIES



Existing and proposed site plan exhibits

P S O M A S

6/28/07



NORTH
N.T.S.

City of Los Angeles Proposition O
South Los Angeles Wetland Park
Existing Site Exhibit



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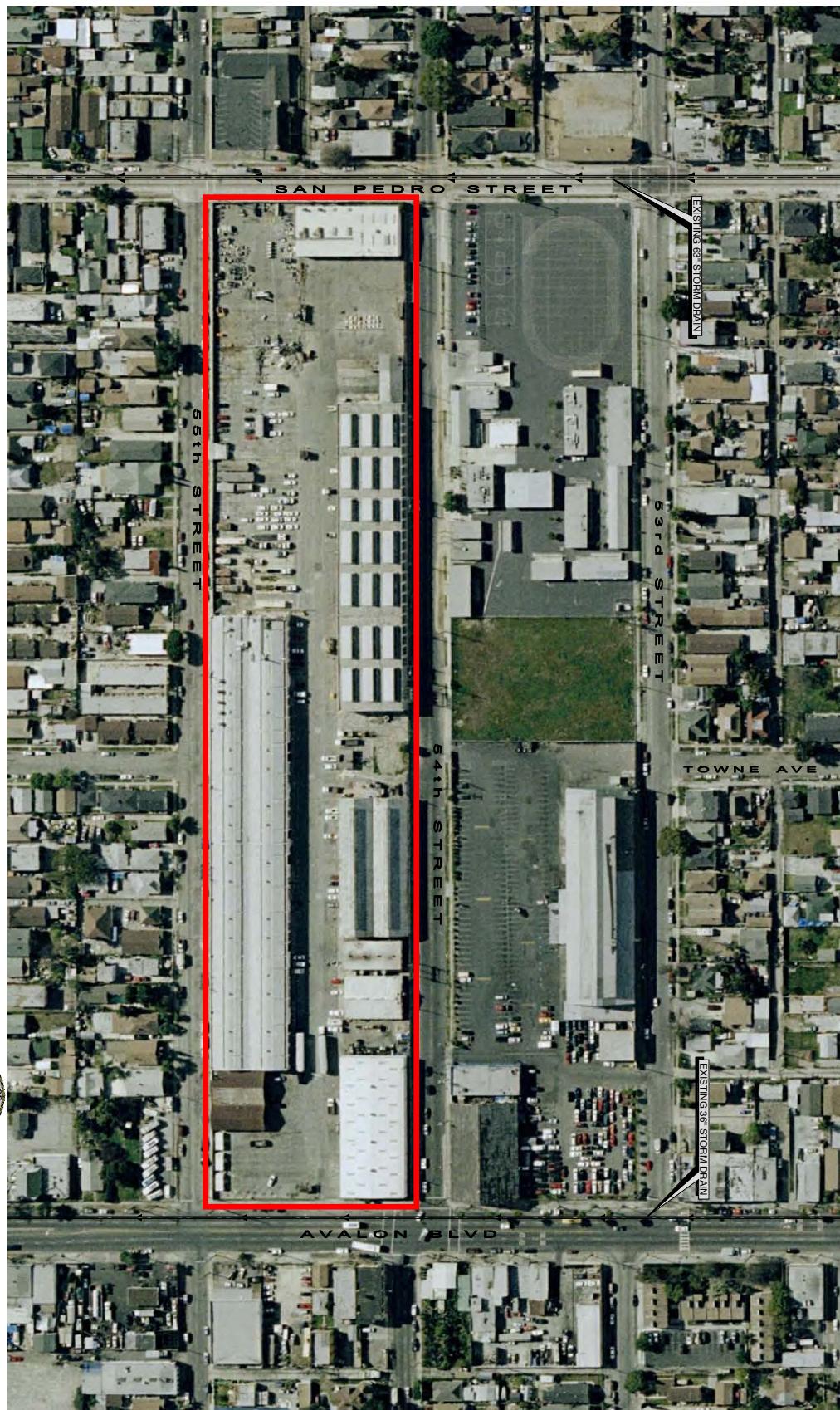
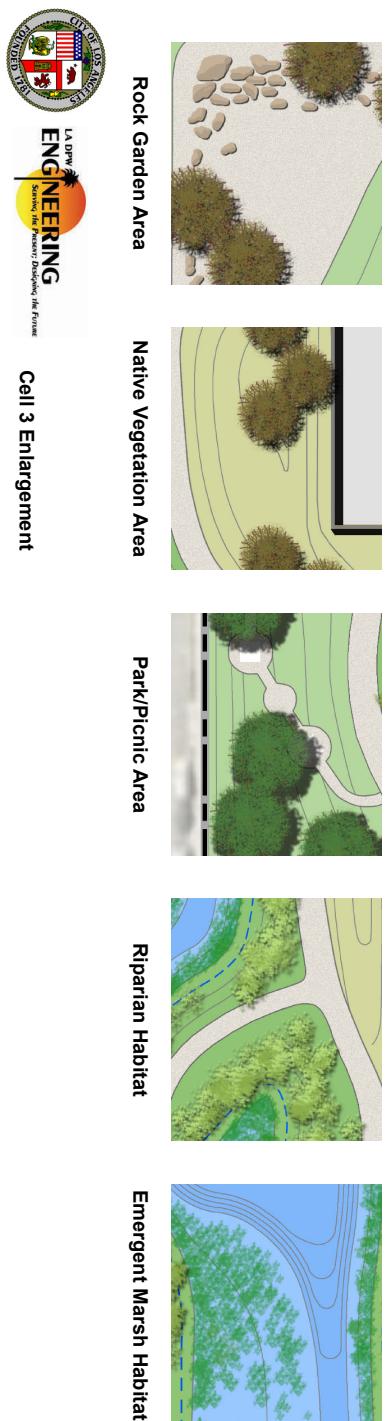
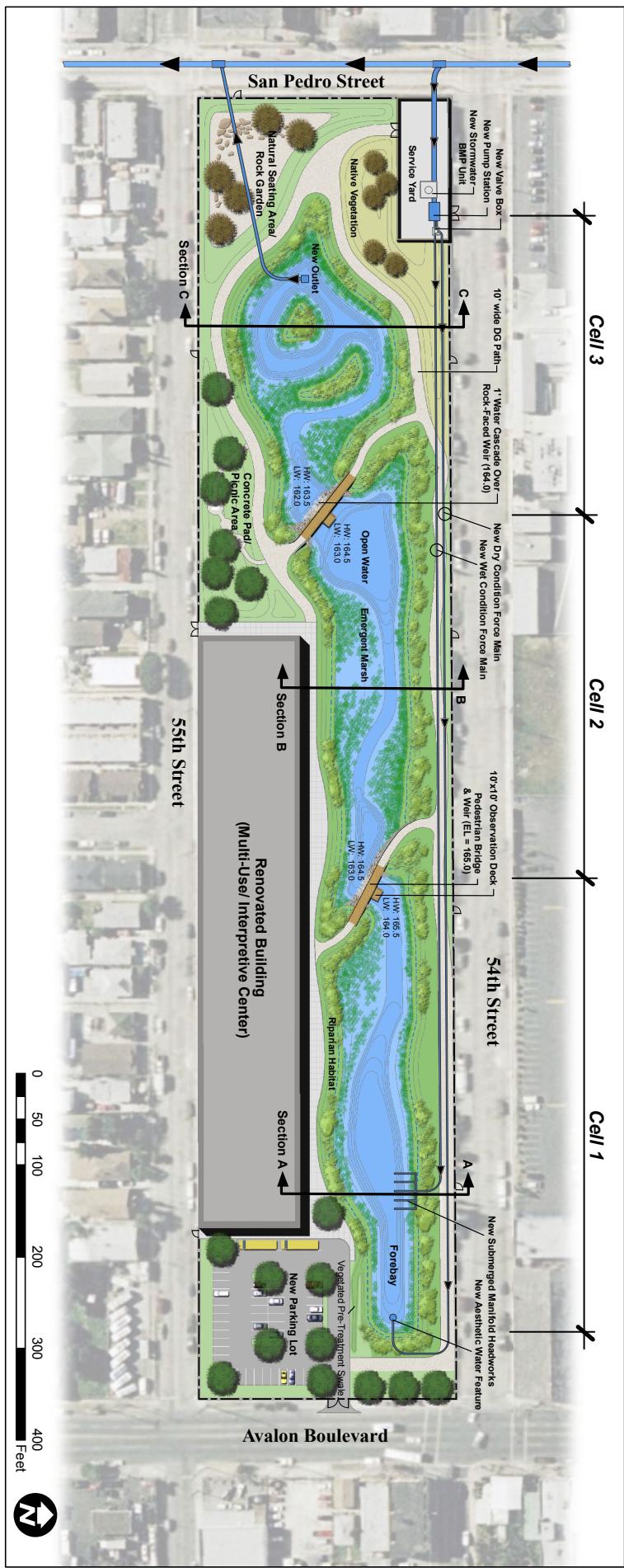


Figure 3-1



Preliminary Site Plan

City of Los Angeles Proposition O
South Los Angeles Wetlands Park

Summary of Environmental Impacts and Mitigation Measures from Final EIR

Table 1-1
Summary of Environmental Impacts and Mitigation Measures

Aesthetics	Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Views Wetlands Park	The proposed Wetlands Park site is an urbanized area with flat topography and there are no scenic vistas within or surrounding the site.	None Required.	Less than Significant.
Sign SUD	The proposed billboards would be visible to pedestrians and motorists along 16 th Street. There are partial views of the downtown skyline to the northeast of the site, but the billboards would not obstruct these views. The billboards are visible to motorists traveling eastbound and westbound on the I-10 Freeway. Westbound motorists have momentary views of the downtown skyline. The billboards would not obstruct these views. Additionally, the billboards are consistent with the industrial uses and variety of structures existing on the proposed Sign SUD site and in the vicinity.	None Required.	Less than Significant.
Visual Character Wetlands Park	Two potentially historical buildings would be demolished, however the buildings are in disrepair and overall the Project would improve the visual character as it would replace the existing Metro maintenance facility with a landscaped public space and result in minor physical improvements (such as painting) to an existing historical building currently in disrepair.	None Required.	Less than Significant.
Sign SUD	The site is a bus yard in an urbanized area adjacent to uses that include manufacturing and warehousing, and elevated freeway and on-ramps. The billboards would not result in significant view blockages, alter or remove valued visual resources or affect open space areas.	None Required.	Less than Significant.
Light or Glare Wetlands Park	In general, the only lighting at the proposed Wetlands Park would be security lighting, which would be directed to minimize spillover. The proposed Project would not result in new sources of glare. Lighting and glare are anticipated to be less than currently generated by the existing Metro maintenance facility.	None Required.	Less than Significant.

“Restoring a Link to Nature” article
from Stormwater Magazine

Restoring a Link to Nature

On the fast track with South Los Angeles Wetlands Park

By David C. Richardson



This Avalon Boulevard area in South Los Angeles will be transformed into a wetland park.

Los Angeles, CA, is a city famous for its pavement. What other city lauds a mere concrete slab as a notable tourist attraction? However, apart from the landmark Hollywood Walk of Fame, life, like the concrete, can be a little harder. Mile upon mile of freeways and boulevards, punctuated by parking lots and service facilities, sprawl over the region, distancing residents from the pleasures and benefits only nature can provide.

The Needs of the People

In his successful mayoral bid, Antonio Villaraigosa pointed to the need for green

space as an important campaign issue. On his campaign Web site, he noted that Los Angeles (L.A.) has “the least accessible park system of any major city in America. Only 30% of Angelenos live within a quarter of a mile of a park, compared with between 80% and 90% in Boston [MA] and New York. Here in Los Angeles, more than 700,000 children do not live within walking distance of a park.”

Jan Perry says before she was elected to the Los Angeles City Council, she would ride through South Los Angeles with a good friend, looking for ways to improve the district. Five miles south of downtown and a half-mile east of the I-110 freeway,

South Los Angeles is a community of single-family homes, duplexes, mid-rise apartments, and light industrial development. But Perry noticed that one thing was absent—nature. With the verdant hills in the distance obscured by haze, and the coastal beaches inaccessible to many residents for lack of transportation, Perry says it became clear to her that in this area, “There just weren’t enough parks to meet the needs of the population.”

Until recently, public works departments across the country have shown a similar affinity for pavement, as have the road builders and developers. Sean Vargas, senior project manager with Psomas Engineering,

says the rationale "was basically flood control. You were just trying to prevent a capital flood from causing damage to public health and safety. They were just draining these very highly urbanized watersheds to paved channels and discharging directly into the ocean, with no treatment." The same was true in Los Angeles.

Thus, untreated stormwater, carrying with it metals from the roadways, nutrients, bacteria, and other contaminants, flowed right to the oceanfront beaches, making the region's parks even less safe and less accessible.

Los Angeles was saddled with two major quality of life problems: a critical parks deficit within the city, and severely polluted stormwater flowing from city streets and storm drains into the rivers and beaches.

New Ideas From the Past

The concept of wetland parks in South Los Angeles is not as alien as might at first seem. Ted Trzyna, president of the California Institute of Public Affairs, wrote in the 2005 book, *The Urban Imperative*, "Los Angeles sits on a wide coastal plain crossed by a network of streams that flow from the mountains to the sea."

"These water courses would have been an ideal foundation for a system of parks including natural riparian habitat," writes Trzyna. "In fact, this was one of the principal recommendations of a visionary regional park plan commissioned by a citizens' committee and published in 1930." According to Trzyna, the parks would serve two purposes: outdoor recreation and percolation of stormwater into the ground.

However, the recommendations were not adopted, and from the 1930s through the 1970s, Los Angeles, like many cities, instead chose to confine its urban streams to narrow channels, according to Trzyna, to maximize the square footage of adjacent lots. The land use pattern, however, now makes it very difficult to restore any semblance of the original riparian ecosystem.

Perhaps it is more than a coincidence when Perry points out, "This area, where these wetlands are going to be, is topographically part of a historic riverbed. So it makes sense to put them in these areas."

Blighted Resource

On her rides through the district, Perry says, one particular parcel caught her attention; it was a maintenance yard for buses and trolleys, owned by the Metropolitan Transit Authority (MTA). It sprawled a full city block, covering more than 9 acres, in the center of the community. "It was pretty blighted," she says. And more than half of the 9-acre site was covered with concrete. In spite of its current status—occupied, quasi-

industrial, and unattractive—Perry looked to the future.

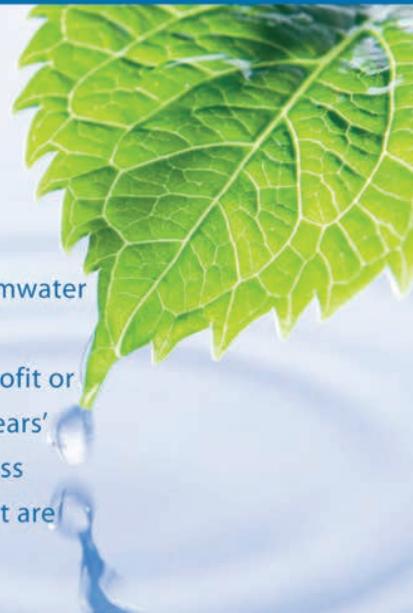
"We did a lot of visioning about what we could do to make it better," she says. From these brainstorming sessions arose an idea for an urban park that would bring the natural features, so sorely missed, into the inner-city neighborhood. After she was elected in 2001 to represent District 9 on the Los Angeles City Council, Perry says she "immediately began working with the various depart-

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ments to put together the energy, the effort, and funding" to realize her vision for a nature park where the maintenance yard stood at 5413 South Avalon Boulevard, in the heart of South Los Angeles.

Wing Tam, assistant division manager of the Watershed Protection Division with the city's Bureau of Sanitation, also saw the potential of the site. Los Angeles, he says, currently has total maximum daily loads (TMDLs) associated with nutrients and metals. "We get limited stormwater, but we get it quickly. There are a lot of times when it rains, or even during dry weather, when runoff goes into the oceans and beaches. It gets pretty polluted."

He adds, "We need to capture that stormwater and use it as a resource. Our goal has always been using green solutions to deal with these pollutants reducing the impact downstream."

Wetlands can perform that function, and when configured within a park, they can also meet the needs of the community for recreation. "We try to integrate the two," says Tam. But, he notes, "In the L.A. region, we have very few natural wetlands left. Over 450 square miles, we only have two natural wetlands—and those are out by the coast."



The site was once a maintenance yard for buses and trolleys.

Tam says the city faces a real challenge: New treatment, wetland, or otherwise, requires real estate. In any city, that, by definition, comes at a premium. "In the L.A. area, everything is pretty much urbanized, so it's very difficult to find sites to do projects unless you start tearing someone's house down, and we know we don't want to do that."

That's why he says the MTA site presented a perfect opportunity. It had the acreage, the location, and—because the Transit Authority no longer foresaw an ongoing need for the site—the availability to house a major stormwater best management practice (BMP).

Perry established a task force to explore the potential of the site as the location for the South Los Angeles Wetland Park, and she was able to convince the MTA itself to join the effort as a partner in support of the project.

As an added impetus, Tam says the site ranked highly among pollution control opportunities in studies performed by the city to prioritize potential stormwater projects.

A concept report prepared and presented to the Citizens Oversight Advisory Committee, which was established to screen proposals under the city's stormwater quality bond issue, met with approval, and the project formally got under way.

Transferring ownership of the MTA yard to the Department of Sanitation, Tam says, would solve a lot of problems. "It would deal with water quality, and the neighborhood would get open space." And with the city's help in finding an alternative site for the transit operations, the MTA would benefit from a smooth transition to a new location. "So it works out for everyone."

Favorable Impressions

Neighborhood residents had already developed a favorable impression of the wetland park concept through recent experience. About a five-minute drive from the proposed South Los Angeles Wetland site, a small wetland, also championed by council member Perry, operates on 1.5 acres of the Augustus F. Hawkins Park.

As in the case of the South Los Angeles Wetlands, this park,

you.



More than half of the quasi-industrial site was covered with concrete.

"In the L.A. area, everything is pretty much urbanized, so it's very difficult to find sites to do projects unless you start tearing someone's house down, and we know we don't want to do that."

too, had been recovered from an industrial site, albeit more than a decade ago. The wetland feature was added in 2001 to enhance the park's appeal, and Perry says it has proven a very popular draw for residents.

Though the wetland at Hawkins Park treats only the runoff from the park's 4.5-acre footprint, Perry says that as a demonstration project it performs a role in educating the community on water-quality issues while building public support for stormwater initiatives. It has also enabled the technical leap to the South Los Angeles Wetlands Park project, which, by contrast, will treat not only the runoff from its own 9-acre footprint, but also a portion of the runoff from the 525-acre tributary watershed of the surrounding community.

Drilling Down

Upon the approval of the Citizens Oversight Advisory Committee, the concept reports completed by the city were forwarded to Psomas Engineering to begin preliminary design work.

Vargas says the firm's experience with bond-funded sus-

tainability programs allowed it to "step in seamlessly and act as an extension of the city for stormwater-related projects." This arrangement, he says, "allows the firm to do anything from administrative support to construction management—basically whatever they need us to do, they can hire us as experts."

The obvious place to start was to go out and survey the site. "It was a pretty involved effort," says Vargas—which included geotechnical exploration, environmental exploration, topographic surveys, boundary surveys, and title report research—"just so we could know everything that we could know about the site."

He says the utility mapping effort was a critical early piece that had to be done in advance of some of the geotechnical work, "because you don't want to be drilling down and breaking a utility line."

The use of the site as a transit facility dates back to 1901, when it serviced the city's fleet of trolley cars. These deep historical roots posed a challenge for the site survey team. "For something that was built in the last 10 years or so, you would have the 'as built' documentation to refer to," says Vargas. "You could pull up the drawings, and they would indicate to you exactly how it was built. You might also survey manhole lids and handhole pull-boxes, to correlate the recorded plans with what is actually on the ground." But in this case, because of the age of the installation, there was very little information available.

However, he says, "Invariably, there's somebody on site who's been there for 30 years and knows where all the buried bodies are." And, he adds, thanks to the close

partnership between the MTA, the council members' office, and the other members of the task force, "They knew exactly who to send us to. In fact, he was out there waiting for us when we showed up."

Besides the lack of information, the site presented a few other drawbacks. "There were rail spurs, because they've been doing maintenance in that area," says Vargas, which could have resulted in surface contamination. He anticipates there will be some remediation, particularly "taking out some of the soils that may be adjacent to some of the clarifiers."

He also notes, "There's always that little twinge, when you're dealing with a brownfield site—it's the unknowns that could get you. That's why we've done all this exhaustive preliminary design report work, to try and know as much about that as we can."

To cap off its investigations, Psomas brought in a subsurface detection unit to probe the underground terrain and validate what it had learned. According to Vargas, the survey uncovered nothing particularly alarming. Nonetheless, as part of the

project's collaborative arrangement, the MTA committed \$900,000 for site remediation and cleanup. Council member Perry says, however, she is hopeful that some of the remaining rail artifacts could be preserved to find a second life as historic design elements for the future park, while some of the antiquated structures might be rehabbed for use as public space.

Monitoring the storm drain at San Pedro Street adjacent to the Wetland Park project, Psomas was able to confirm, during a particularly dry season of September 2007, an average flow of approximately 14,000 gallons per day (gpd), a quantity of water that Vargas says would be sufficient to sustain the wetland habitat during periods between rains.

Target Funding

In addition to the \$900,000 the MTA plans to contribute for site remediation, Psomas estimates the total project cost at about \$24 million. Assembling this funding, Perry says, has been the toughest challenge in putting together the wetland project.

A recent bond issue, Proposition O, is expected to provide \$8 million, but the balance must be stitched together from wherever the money can be found. "Some of it's grant money, some of it's brownfields money; it just depends," says Perry.

According to John Saldin, senior civil engineer with the Los Angeles Department of Public Works, the initiative is being funded via numerous sources, including a Baykeeper settlement; Proposition K, which targets park improvements through a competitive grant process; Proposition 50, which focuses on

protecting drinking water supplies; and Proposition 40, a measure broadly targeting air, water, parks, and resource protection.

As project manager for the South Los Angeles Wetlands, Saldin says the cooperation between various agencies involved in the project has been key in overcoming the funding hurdles. "We interact with a number of other groups in the city. They are the grant holders, but we provide them with the documentation to get the grant money."

But according to Vargas, Proposition O has been the key measure facilitating the effort. Had it not been for the passage of Proposition O in 2004, authorizing the city to issue up to \$500 million in bonds for "green stormwater solutions," Vargas says, getting the wetlands project started "would have been an uphill battle."

He explains, "I'm working on a number of projects for other municipalities, for nonprofits that are real advocates for sustainable stormwater solutions, and without a measure like Proposition O, the money is really not there. You've got to get people excited about it generally to get a donor."

"Some of the backing that the council member wields is the ability to round up the funding and get the project going," says Saldin. "It takes some coordination, but once it's all lined up and each group knows what it needs to do, then we just do it."

And they are making progress. With the property transfer yet to be finalized, and with time still to go before the Bureau of Sanitation finally takes occupancy of the site, design work is already more than 50% complete.

Bottom Feeders and Larvae Eaters

As specified in Psomas's preliminary design report, the wetlands will comprise three individual cells covering a total area of between 4 and 4.5 acres. According to the report, the division of a constructed wetland into individual cells increases the treatment efficiency and may also allow for easier repairs, cleanout, and general maintenance. At high water level, the total volume is 7.5 acre-feet. To prevent groundwater infiltration, the treatment area will be contained within a clay liner.

Although the facility will be designed to manage an average baseflow of 80,000 gpd, to achieve maximum treatment, Vargas says, "We're putting in systems to divert the entire dry-weather flow into the wetlands. We're breaking into the pipe, and all of that runoff that's running in the very bottom of the pipe—the very low-flow—we're diverting to the wetland."

During this low-flow regime, water captured from the storm drain will pass through a hydraulic separator to remove grease and particulates. The pretreated water will then be pumped up and discharged at the headworks of the wetland.

During the high-flow regime surrounding a storm event, a larger pump and diversion system will direct a flow of up to 16 cubic feet per second to the headworks, filling out the wetland to its maximum extent of 4 to 4.5 acres to achieve a treatment volume of 2.1 acre-feet.

"We can divert water very quickly out of the storm drain and get the most polluted water, the first flush, into the wetland very quickly, and then we can shut the pumps down and let the wetland's biological process take its time as that water is slowly discharged," says Vargas.

After passing through the wetland with a residency period of between 50 and 120 days, the water will exit the wetland



you.
me.



is a question of maintaining drainage inflow and outflow so that there is never a condition that the water would be stagnant."

According to Saldin, 72 hours is the longest period of time the water can remain standing before there is the risk of a vector problem. "This design would not allow for the flow to stop for anything near that long," he says.

Tam says vector control experts, whom he consulted, confirmed the design would meet mosquito control requirements. Nevertheless, Tam says, "We'll probably take the precaution of putting in mosquito fish to help out by eating the larvae."

The upland areas will be landscaped with "native high-desert type vegetation that will require about a third of the irrigation that would normally be required by a public park with turfed lawns," says Vargas, and, as a result, the park's irrigation requirements will be minimal.

Psomas's intense planning effort leaves no detail to chance, be it aesthetic or operational. The design even specifies white, weather-resistant "split-rail style" fencing around the wetland itself, to provide a necessary modicum of safety while maintaining the rustic flavor desired by the community. And, Vargas says, in keeping with the city council's request not to have another chain link fence imposed upon the neighborhood, the park will be bounded by an "architecturally substantial" tubular steel fence. "That's the level of detail they wanted to really make sure it was a great facility," says Vargas.

"It's incredibly complex the way that this has come together, with different funding sources and different milestones that the project has to hit in order to retain that funding," says Vargas. "It's going to be done in segments in order to get the demolition to happen, the remediation happening, and the construction to begin, while the rest of it is being demolished, remediated, and constructed."

The completed park is slated to open by late 2010.

But the partners plan to continue the collaborative effort beyond the ribbon cutting. In accord with negotiations settled during the early stages of planning, management responsibilities for the park will be split between two of the partner agencies. The wetlands portions of the park will be maintained by Bureau of Sanitation, while the upland portions will be managed by the Bureau of Parks and Recreation.

Vargas envisions the finished park with such features as a rock garden outdoor classroom, boardwalks, and observation decks. Adding to this list, Tam foresees trails and "picnic areas consistent with all of the other wetland park development that's going on throughout the country." Further, he believes the park



The park will feature trails, boardwalks, and observation decks.

Psomas

at the western portion of cell 3 through an outlet structure and discharge into the storm drain main in San Pedro Street.

"The way the hydrology of the basin works, currently, all of the water that we will be treating onsite would have bypassed the site, because it's already in the storm drain," says Vargas. With the new design, however, "We take out as much as we can and fill the wetland. That gives us our treatment volume; when that is full, everything else goes by like it did before. You don't want to wash your wetland out."

"After about 6 inches have discharged back into the storm drain," continues Vargas, "the pumps will be reactivated, filling that portion back up" with the remaining storm flow.

Vector control, of course, is an important design consideration for any constructed wetland. Saldin says keeping the water moving is the key to controlling pests such as mosquitoes. "That



how many tours they did," says Tam. "They actually bring in schoolchildren and community groups to look at what's there.

"You would not expect to see anything like that in Los Angeles," he continues. "That's the perspective you have—and that's why we're trying to change that a little bit here."

Just a Beginning

Perry says these two wetlands parks will form part of a chain in South Los Angeles "to remediate and remove contaminants in a natural and holistic way that would benefit people directly."

And, Perry says, it's good policy. "As a city we have matured; we understand that wetlands assist us in dealing with urban runoff. When we capture stormwater flow, there's an opportunity to clean it.

"There are a lot of layers to this park," she adds. "I think it's a wonderful opportunity for young people to learn about ecosystems, to learn about native habitat and native species, an opportunity to take a property that may have been blighted in the past and turn it into something that is hands-on and friendly, that can not only provide an aesthetic benefit but also a community benefit."

Perry makes perhaps the strongest case for the South Los Angeles Wetland Park by simply describing an afternoon visit to the wetland shores of Augustus Hawkins Park. "I've personally observed herons and egrets and shore birds that live in the vegetation along the water," she says. "And it's pretty amazing. The kids really love it. We have lots of pollywogs, and all sorts of things, swimming in the water. If you go down there at four o'clock in the afternoon you can really hear the birds in a big way."

"It has a calming effect," continues Perry. "It's a different kind of park. It's not the kind of park where you go and they have soccer, baseball, and all those types of things. It's a passive park where people come in, and they have picnics, sit down, relax, and watch their kids while they ride their bicycles on the path. People really seem to be happy and peaceful when they're in there."

"People really enjoy that park, and to know that another one is coming that's bigger and better—that's something people seem pretty happy about."



Psomas

"can serve as a public education tool."

Perry says the wetland concept has already proven itself in this community, on a smaller scale, at Augustus Hawkins Park. During the 18 months of construction, she says there was one surprise: "How quickly the plants grew. It looks like it's been there forever now. It's extremely attractive."

"It was instructive, in that you see what was successful, and what was not, both from the wetlands standpoint, and from the appurtenant facilities," says Vargas. "We were able to learn some good things about how the wetland park wanted to behave locally."

"When I was there, I was amazed at

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