

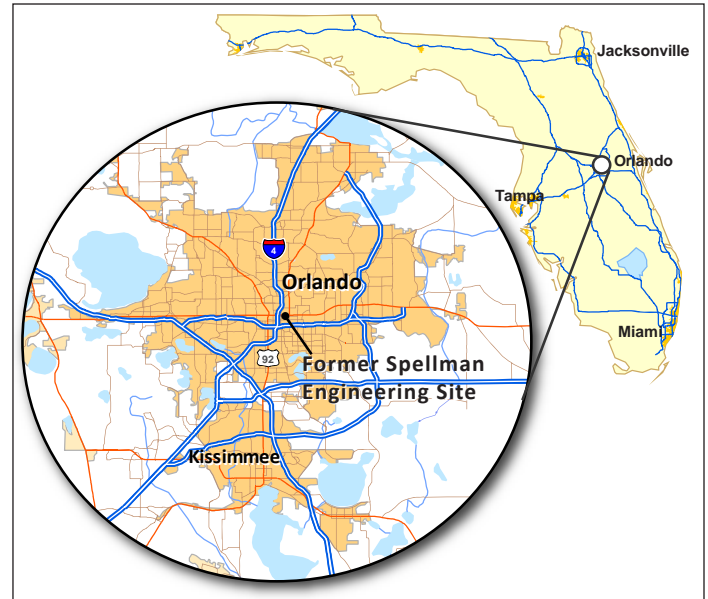
# Introduction

For years, one of the most important pieces of undeveloped land near downtown Orlando remained largely vacant due to ground water contamination. The 26-acre Lake Highland property, part of the northern gateway to the city’s Central Business District, was owned by the City of Orlando (City) for the use of the Orlando Utilities Commission (OUC). Thanks to the early and sustained engagement of the community, local and state governments, and EPA, new recreation facilities have been built for a local school. Other acreage is serving as a catalyst for infill development.

EPA, the Florida Department of Environmental Protection (FDEP), the City, OUC, surrounding neighborhoods and Lake Highland Preparatory School (LHPS) have been working together in support of a coordinated approach to the cleanup of the Former Spellman Engineering site and the redevelopment of the adjacent Lake Highland property. The property’s significant value presented the City and OUC with the opportunity to use proceeds from its sale to help fund the site’s cleanup, while keeping the site off of EPA’s National Priorities List (NPL). The project has provided positive outcomes for all parties involved.

EPA and FDEP’s priority remains the protection of human health and the environment, which is being expedited through the process. For the City and OUC, the site’s cleanup protects public health, while the adjacent property’s redevelopment will provide new land uses to address community needs. For the surrounding Park/Lake Highland and Lake Formosa neighborhoods, the site’s cleanup addresses local health and safety concerns, removes a community “eyesore,” and results in the Lake Highland property’s redevelopment in a manner consistent with community goals and priorities. For LHPS, the site’s cleanup provides an adjacent land area for both new and expanded school facilities.

Today, the school’s O’Meara Family Sports Center includes a new ball field, practice fields and parking, with future expansion plans calling for a gymnasium and maintenance facilities. The Dinky Line segment of the Orlando Urban Trail, a paved recreational trail, now extends through the area. The City and OUC are also exploring opportunities for mixed-use redevelopment near Central Florida’s new SunRail commuter rail line and other planned public transit facilities. The site’s ground water cleanup

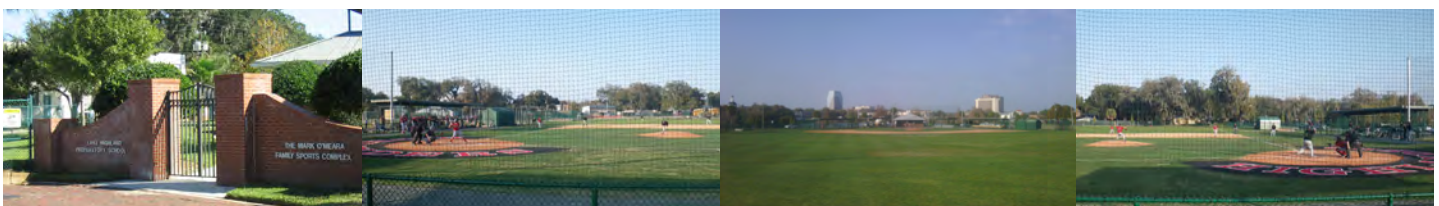


The Former Spellman Engineering site is located in Lake Highland, the northern gateway to downtown Orlando.

system was buried underground, allowing for remediation while at the same time optimizing the area for reuse.

This case study explores the working relationships and innovative settlement agreements that have led to the cleanup of the Former Spellman Engineering site and reuse of the adjacent Lake Highland property. For example, in 2008, EPA and the City signed the nation’s first Contiguous Property Owner agreement, in which the City agreed to voluntarily implement the site’s estimated \$12.9 million remedy. LHPS also worked with the City to finalize the project’s Sale and Purchase agreement and with the City, EPA and FDEP to finalize Bona Fide Prospective Purchaser and Brownfield Site Rehabilitation agreements that addressed potential liability concerns and facilitated the property’s reuse.

The following pages trace the evolution of cleanup and reuse efforts, highlighting local planning efforts and coordination with EPA and FDEP in the 1990s and 2000s, as well as ongoing cleanup and reuse activities in 2011. The case study provides information and lessons learned to parties interested in Superfund site reuse and how to address remedy and reuse considerations early in the Superfund process.



Local school facilities now include a new ball field and practice fields, with additional land uses planned for the area in the future.

## Site History, Contamination and Remediation

From 1963 to 1969, the Spellman Engineering Company used trichloroethylene, a common degreasing solvent also known as TCE, to clean electronic components at its facility. TCE discharged during that time contaminated ground water in the vicinity of the facility, including the adjoining Lake Highland property.

In 1992, ground water underlying the Lake Highland property was determined to have been contaminated by TCE. The City proactively sought opportunities to work with EPA and FDEP to address the site. Due to community concerns over site stigma and the duration of the cleanup, the City of Orlando also requested that EPA not list the site on the NPL. The City and the local community indicated a strong preference for a third-party cleanup using a property divestiture, cleanup and redevelopment approach. EPA supported this approach, while maintaining that the NPL listing process would move forward if project milestones were not attained.

Since there was no viable responsible party identified, the City conducted a series of voluntary investigations at the site from 1992 to 2004 that defined the extent of the TCE contamination plume, evaluated the potential risks associated with the contamination and evaluated cleanup alternatives. Key findings included:

- No human exposure to contaminated ground water was occurring.
- The ground water plume underlay approximately 40 acres.
- Migration to the Floridan Aquifer potentially threatened nearby municipal supply wells.
- Contamination could be addressed through an engineered remedy.

The investigations also determined that the area could be redeveloped during cleanup activities and could be cleaned up to meet EPA's unrestricted use/unlimited exposure criteria.

EPA selected a remedy for the site's contamination in its 2004 Record of Decision. The final remedy, modified in 2010, includes a combination of soil and ground water treatments, including electrical resistance heating, chemical oxidation, enhanced bioremediation and monitored natural attenuation.

In 2008, EPA and the City signed the first-ever Contiguous Property Owner agreement. In exchange for EPA resolution of potential liability concerns, the City agreed to implement the site's estimated \$12.9 million remedy. The agreement included a covenant not to sue, which eased liability concerns, and waived EPA oversight costs. Implementation of the site's remedy began in 2011, with completion of cleanup activities anticipated in 2015, to be followed by a period of post-remediation monitoring. Funding for post-cleanup activities will be in addition to the estimated cost of the site's remedy.

Throughout all the planning and cleanup activities, EPA and FDEP staff met regularly with local stakeholders to share information and updates and to incorporate community feedback into the plans. Close coordination of the community's reuse priorities with the cleanup planning has enabled the parties to use the site during the cleanup process.



*The location of the Former Spellman Engineering Company facility.*



*Community meeting, 2006.*



# Project History

## 1990s – 2004

### *Assessing Contamination, Planning for the Future*

Reuse planning for the area began in earnest in the mid-1990s, several years after the discovery of ground water contamination emanating from the Former Spellman Engineering facility.

“Initial assessments indicated that the ground water plume did not pose an immediate threat to human health or the environment,” recalled David Keefer, EPA’s previous site project manager. “It was also clear that the plume was slowly spreading. This was a problem that was only going to get bigger and more expensive to clean up.” First, however, the characteristics and extent of the contamination had to be determined. FDEP served as the site’s lead agency during this time.

“Identification of the contamination slowed down what otherwise might have been rapid redevelopment,” noted Park/Lake Highland Neighborhood Association President Cathy Kerns. “With the assessment of the area going on, and banks not willing to lend money for development until the contamination had been addressed, there was time to plan.”

From the outset, the City and OUC were interested in finding a creative solution that would use redevelopment to help finance the site’s cleanup. “There was an opportunity to capitalize on the value of the Lake Highland property as a way to help fund the site’s cleanup, with the goals being a faster cleanup and avoiding the potential stigma associated with EPA listing the site on the NPL,” recalled Assistant City Attorney Kyle Shephard. “Everyone in the community was looking to avoid that outcome.”

“Our goal was to utilize a City and OUC asset to satisfy several community needs. We needed to help EPA commence a cleanup, but we also wanted to encourage transit-oriented infill that was sensitive to the surrounding historic neighborhood, while also helping provide athletic opportunities to an important downtown educational institution,” said Orlando Mayor Buddy Dyer. “We also managed to alleviate long-challenging parking problems for the nearby shopping district and establish a segment of the Dinky Line Trail. Fortunately, we found a capable and willing partner in this process with EPA.”

While the City conducted a series of voluntary investigations, community reuse plans for the area evolved from affordable and single-family residential development to mixed commercial, residential and recreational land uses. “It became clear that land uses would likely be unrestricted following cleanup, given that everyone is on municipal water,” said Cathy Kerns. “EPA and FDEP have done a good job of providing regular site updates over the years. We were able to build site information into our planning efforts.”

**Site Location Map**



In 2000, a city-sponsored Steering Committee developed the OUC/Lake Highland Development Plan. The Committee, which included representatives from local neighborhood and business associations, LHPS, the City, OUC and the City’s Downtown Development Board worked together to create the Plan. The Plan was adopted based on extensive community input and approved by the Downtown Development Board’s Design Review Committee in August 2000.

The Plan took into consideration existing site conditions, infrastructure availability and surrounding land uses. The Plan proposed single-family and multi-family residential development for the eastern portion of the Lake Highland property and commercial retail and office land uses and/or a middle school construction for the western portion. Areas were designated for recreation fields and recreation support facilities. Additional elements of the planning process included a traffic analysis and development of drainage and landscaping plans and design standards.

The Plan and its accompanying “Planned Development” (PD) zoning, finalized in 2001, stated that “the OUC/Lake Highland Development Plan area shall be developed as an urban, mixed-use, pedestrian and transit accommodating infill/redevelopment project that embraces the best practices of sustainable development and Traditional Neighborhood Design.”

In the interim, nearby LHPS expressed interest in leasing a 6-acre portion of the property for sports fields and signed a

five-year lease in 2002. “The school had always been interested in the property north of Lake Highland,” said LHPS Board Chairman Randall Rex. “The school was land-locked. At the time, we had to go outside of the community to lease space for softball, baseball and practice fields. The school had a significant need for new sports-related facilities. The lease provided the school with an interim option that worked well.” By late 2003, the school’s O’Meara Family Sports Center had opened on the central part of the property.

Also in 2003, EPA assumed responsibility as the lead agency for the site’s cleanup. “FDEP and EPA have worked well together at the site,” said FDEP project manager George Houston. “Following the site assessments conducted by the City, when we understood the scale and scope of the contamination, it was clear that the federal Superfund program would be a vital partner for the site’s cleanup.”

EPA and FDEP’s coordination with the City led to the site’s 2004 Record of Decision, which provided a powerful impetus for the site’s coordinated cleanup and redevelopment to move forward. The feasibility study conducted prior to the issuance of the Record of Decision determined that the area could be redeveloped during cleanup and that the site could be cleaned up to meet EPA’s unrestricted use/unlimited exposure criteria.

“The Record of Decision set the stage for the site’s cleanup and redevelopment,” said Bill Denman, EPA’s current project manager at the site. “All parties were looking for creative approaches and solutions to be able to move forward. At the end of the day, everyone knew that EPA would have to list the site on the National Priorities List if no other way forward could be found.”

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*“All parties were looking for creative approaches and solutions to be able to move forward.”*

*– Bill Denman, EPA Project Manager*

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## **2005 – 2009**

### ***Working through the Process...***

With the site’s Record of Decision in place, the City and OUC identified an approach for beginning the cleanup without EPA having to list the site on the NPL. They planned to pursue a public/private partnership approach to clean up and develop the area, using the sale of Lake Highland property parcels to fund the cleanup. Initial property appraisals indicated that sale proceeds could cover and perhaps even exceed the cost of the site’s estimated \$12.9 million cleanup. The City could also insist on high-quality planning and development of the property.

“Owning such a valuable piece of property, with its beautiful location on the shores of Lake Highland and proximity to downtown Orlando and great surrounding neighborhoods, meant that the taxpayers of Orlando stood in a strong bargaining position with any prospective purchaser,” recalled Byron Brooks, the City’s Chief Administrative Officer. “We could ensure high-quality development while earning a return that could help pay for the cleanup.”

In November 2005, the City and OUC signed a joint resolution calling for the “divestiture, cleanup and redevelopment of certain city-owned property near Lake Highland in Orlando, Florida.” The resolution established a Joint Review Committee (JRC), a six-member group composed of three OUC staff members and three city staff members, to oversee the process. The resolution also recognized the importance of community involvement, establishing a Neighborhood Advisory Committee (NAC) to provide “meaningful input from community leaders, the local business community, [and] residential communities adjacent to the Property ... [that] will be critical to the success of the redevelopment and remediation project.”



For its part, EPA agreed to refrain from listing the site on the NPL. “EPA and FDEP supported the City’s approach,” said EPA project manager Bill Denman. “At the same time, we were clear that the process had to yield results. For us, a timely cleanup was the key outcome.”

With significant time and resources invested, the City and OUC were anxious to move forward as well. “Our goals were to ensure the site’s cleanup, in compliance with EPA and FDEP orders, and redevelopment consistent with neighborhood priorities,” recalled Assistant City Attorney Kyle Shephard. “This was the next step in the process and as with any planning process in Orlando, community input was critical.” As the JRC considered which property parcels might be included in a request for development proposals, the NAC met twice in 2006, hosting a public meeting to gather community input.

“The community had worked hard on the Development Plan for the area. It was important that our priorities for compatible local land uses were reflected in any RFP [request for proposal],” said Cathy Kerns, who also served as a member of the NAC. “Ensuring neighborhood quality of life was critically important in any development scenario.”

In May 2006, however, the process took a new and unexpected turn. A neighborhood organization stepped forward with a proposal of its own.

**...Adjusting to Changing Conditions...**

LHPS notified the City in May 2006 that it would exercise an option within its lease agreement with the City to acquire the 6-acre area it had leased since 2002 for recreational facilities. The school also later proposed, in conjunction with a development partner, the Missouri-based Environmental Liability Transfer (ELT) company, to purchase the Lake Highland property parcels, clean up the entire site and develop the rest of the 26 acres. Since a private third-party was willing to assume responsibility for the site, the need for a proposed Request for Proposals (RFP) process was eliminated. With 6 acres at the center of the property no longer available for sale, and the local real estate market increasingly under pressure from a slowing national economy, the City and OUC had to consider alternatives to their original divestiture plan.

“It was a promising time,” recalled Gordon Spears, Vice-President of the Lake Formosa Neighborhood Association. “While we were looking to hear more from the school about its longer-term plans for the area, it seemed like the school’s redevelopment proposal could fit well with community priorities.”

To reflect these changes, the City and OUC issued a restated joint resolution in September 2007, appointing the City as the lead agent to work with LHPS on a sale and purchase agreement and with EPA and FDEP on agreements to address site liability and lien issues. Discussions continued into mid-2008, when changing conditions once again forced parties to adapt.

This time, the news was more challenging. ELT had withdrawn as the project’s development partner. “It was an issue of dollars and cents,” recalled LHPS’ Randall Rex. “At the end of the day, [ELT’s] risk premium was too high for the school to be able to continue with the project.” After several years of effort, the breakdown marked the end of third-party cleanup and redevelopment efforts at the site.

**Timeline of Events**

<b>1940s – 1980s:</b>	Orlando Utilities Commission (OUC) uses properties adjacent to the site as operations and maintenance center	<b>2006:</b>	OUC and City empanel Joint Review Committee (JRC) and work with Neighborhood Advisory Committee (NAC) to incorporate community feedback regarding site cleanup and redevelopment
<b>1963 – 1969:</b>	Spellman Engineering Company uses trichloroethylene (TCE) to clean electronic components, contaminating ground water in vicinity of facility, including adjoining Lake Highland property, a 26-acre area owned by City	<b>Sept. 2007:</b>	The City and OUC amend Joint Resolution to adapt to changing market conditions
<b>1990s – 2000:</b>	Reuse plans developed for Lake Highland property	<b>Jun. 2008:</b>	Private party cleanup approach does not move forward. City pursues voluntary cleanup approach, with LHPS to acquire portion of Lake Highland property
<b>1992:</b>	TCE detected in ground water	<b>Oct. 2008:</b>	First-ever Contiguous Property Owner (CPO) Agreement signed by City and EPA; CPO includes covenant not to sue and City agrees to implement site’s remedy
<b>2000:</b>	City’s Downtown Development Board approves community’s OUC/Lake Highland Land Use Plan (later amended in 2001); site zoned for Planned Development	<b>Oct. 2008:</b>	Key parties simultaneously sign Sale and Purchase and Bona Fide Prospective Purchaser agreements
<b>2002:</b>	Portion of Lake Highland property leased to LHPS for use as a recreation area	<b>Sept. 2009:</b>	Updated Brownfield Site Rehabilitation Agreement (BSRA) signed by City, LHPS and FDEP
<b>2003:</b>	EPA assumes responsibility as lead agency for the site’s cleanup	<b>Sept. 2010:</b>	EPA modifies site remedy, issuing Explanation of Significant Difference, and approves final cleanup work plan
<b>1992 – 2004:</b>	The City conducts voluntary site investigations, in coordination with EPA and FDEP	<b>2011:</b>	Site cleanup underway
<b>Sept. 2004:</b>	EPA issues Record of Decision, selecting remedy for site	<b>Jan. 2011:</b>	LHPS opens new ball field and practice fields on Lake Highland property
<b>Nov. 2005:</b>	City and OUC issue Joint Resolution for divestiture of Lake Highland property to expedite site’s cleanup and redevelopment		



EPA's message to the City and OUC remained clear and consistent. "We emphasized the urgency of the site's cleanup moving forward, one way or another," said project manager Bill Denman. "Everyone had been working together in good faith on an alternative to placing the site on the NPL. In 2008, it looked like that was perhaps the only remaining option."

However, the parties remained optimistic that another way forward was possible. The key parties had built strong working relationships, as well as trust between them. In addition, EPA had made significant progress in developing new tools and agreements necessary to facilitate site cleanup and redevelopment.

Soon, it was the City and LHPS' turn to provide the breaking news.

### ***...Reaching Resolution***

In summer 2008, the City announced that it would take the lead and voluntarily clean up the site, while selling 18 acres of the Lake Highland property for recreational reuse to LHPS. In turn, LHPS announced that a separate entity, OS Complex, Inc., would be created to acquire and lease the acreage to the school. The announcements followed several weeks of intense discussions with EPA and FDEP. "When the City agreed to voluntarily clean up the site, it was with the understanding that EPA would help guide us through the next steps, through what needed to be done to address the City's concerns and federal and state cleanup requirements," recalled Assistant City Attorney Kyle Shephard.

EPA site attorney Karen Singer coordinated closely with EPA's Office of Site Remediation Enforcement (OSRE) and staff from the U.S. Department of Justice (DOJ) to develop an efficient process for moving forward. "Making [the project] a reality required expertise across a range of areas," said Ms. Singer. "We were reviewing model agreements, financial assurance requirements, and EPA guidance on agreements with municipalities and the Superfund Brownfield Amendments to develop the type of agreements that would be quickly approved by EPA and DOJ management and meet the needs of all parties."

"At the Spellman site, EPA was able to use its settlement tools designed to help address the Superfund liability concerns of parties willing to clean up and redevelop contaminated properties. We recognized the need to tailor these tools to address the site-specific concerns of multiple stakeholders at the site," explained OSRE attorney Susan Boushell. "EPA worked together with the local government and landowners to develop agreements that would provide the liability protections and comfort needed to foster the protective cleanup and sustainable reuse of the property."

The key issue was how to take advantage of the opportunity presented by a contiguous property owner which volunteered to

### **Lake Highland Preparatory School**

A private school situated on a 26-acre campus, LHPS is located on Lake Highland, directly across from the Former Spellman Engineering site.

Founded in 1970, the school currently enrolls approximately 2,000 students, pre-kindergarten through 12th grade.



clean up adjacent contaminated property. EPA project manager Bill Denman hosted weekly conference calls with other EPA staff, FDEP, the City, LHPS and site contractors to address the situation. During these calls, regulators and local stakeholders provided site updates, addressed ongoing issues and challenges, and identified and assigned tasks for completion before the next call.

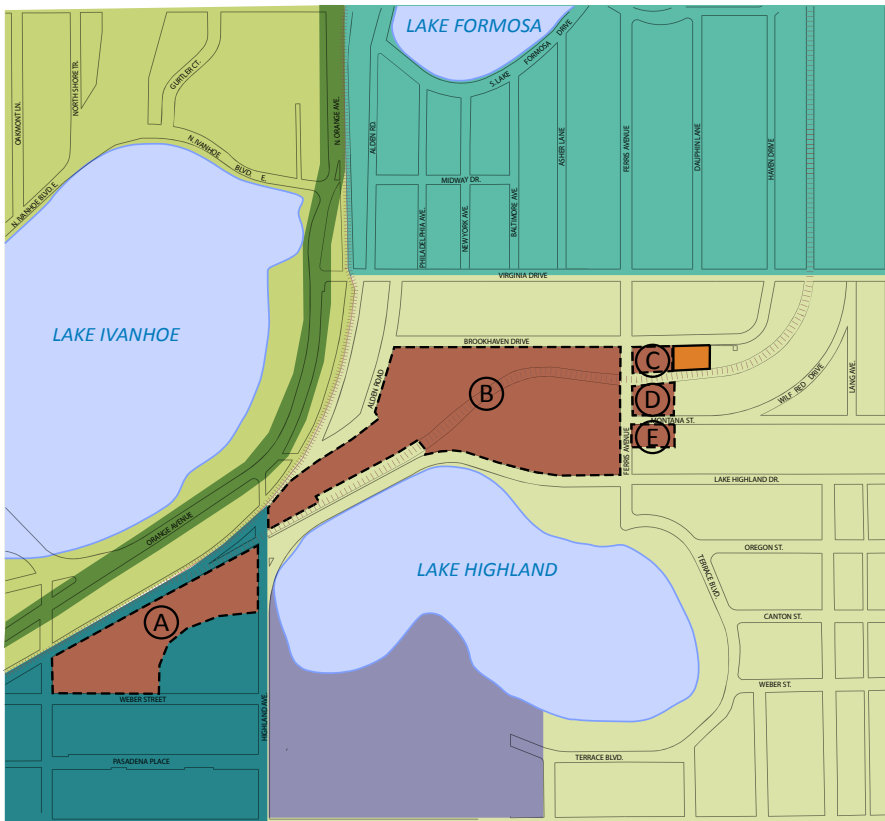
"There was a remarkable energy and atmosphere of creativity in the group," recalled Bill Denman. "People shared a willingness to work through issues and find solutions because everyone

### **The Bigger Picture: EPA and Reuse**

Efforts to address future land use considerations at the Former Spellman Engineering site fit in well with emerging nationwide interest in the revitalization of contaminated areas, including Superfund sites. With the creation of EPA's Superfund Redevelopment Initiative in 1999 and its Land Revitalization Agenda in 2003, EPA's Office of Solid Waste and Emergency Response launched a new EPA initiative focusing on promoting land reuse and revitalization at contaminated sites.

In 2002, the Small Business Liability Relief and Brownfields Revitalization Act also became law. The Act was designed to make the acquisition and redevelopment of contaminated properties like Superfund sites easier by addressing the liability concerns associated with these sites. EPA's Office of Site Remediation Enforcement has a team devoted to facilitating and implementing these liability protections.

## Site Parcels and Status (2011)



- Lake Highland Property Parcels
- Former Spellman Engineering Facility
- North Orange Avenue Business District
- Lake Highland Preparatory School
- North Orange Neighborhood
- Lake Formosa Neighborhood
- Park Lake/Highland Neighborhood
- Orlando Central Business District

0 250 500 1,000 Feet



Parcel	Acreage	Status
Tract A	5.76	Parcel owned by City of Orlando. Redevelopment in planning stages.
Tract B	18.17	Parcel owned by LHPs and partner OS Complex, Inc. New ballfield located on parcel, with additional recreational facilities planned.
Tract C	0.82	Parcel owned by City of Orlando. Redevelopment in planning stages.
Tract D	1.13	Parcel owned by City of Orlando. Redevelopment in planning stages.
Tract E	0.41	Parcel owned by City of Orlando. Redevelopment in planning stages.

could see the benefits and potential outcomes. Everyone had an interest in making the site’s cleanup and reuse possible.”

This period of intense federal, state and local collaboration and problem-solving extended over several months, producing three interlinked agreements to resolve liability that were signed on the same day in October 2008.

- *Contiguous Property Owner (CPO) Agreement:* In the first agreement of its kind in the nation, a non-liable adjacent property owner (the City) agreed to voluntarily clean up a Superfund site. The City agreed to conduct the cleanup selected in the site’s 2004 Record of Decision, committing to spend approximately \$12.9 million to fund the cleanup. EPA’s southeast regional office coordinated closely with EPA Headquarters as well as the U.S. Department of Justice to develop and approve the agreement, which provided the City with a covenant not to sue for the cleanup work or any response costs, including oversight costs. A covenant not to sue is a

provision promising that EPA will not bring any future legal actions against agreement signatories regarding a site and the specific matters named.

- *Property Sale and Purchase Agreement:* OS Complex, Inc. and LHPs agreed to purchase the 18-acre Tract B property for \$2 million from the City. The proposed Dinky Line Trail was rerouted as part of the agreement, from a former rail line crossing the site to the edge of the Tract B property.
- *Bona Fide Prospective Purchaser (BFPP) Agreement:* OS Complex, Inc. and LHPs completed the required all appropriate inquiries and qualified as BFPPs. In exchange for their significant financial contribution to the cleanup, EPA entered into a BFPP Agreement with both parties, waiving any site liens and providing covenants not to sue. The covenants mean that the parties will not be liable under Superfund for their activities in the

future, assuming that they continue to meet the ongoing BFPP obligations, including taking reasonable steps to stop continuing release, prevent any threatened future release, and prevent or limit human, environmental or natural resource exposure to any previously released hazardous substance.

Orlando City Council also approved a fourth agreement, an updated Brownfield Site Rehabilitation Agreement (BSRA), in October 2008. Signed in September 2009, the updated BSRA conveyed the site's original BSRA agreement, which resulted from the earlier third-party cleanup negotiations, from LHPS to the City. The updated BSRA enabled the City to receive state voluntary cleanup tax credits to help offset a portion of the site's cleanup costs.

"Putting the agreements together and coordinating their signing was a complex process," said Assistant City Attorney Kyle Shephard. "But we had a clear road map and local, state and federal partners willing to share their expertise. City staff and our partners shared a dedication and commitment to see this through."

Together, the coordinated agreements made the difference. Key parties remained patient, weathering delays, uncertainties and rapid changes in previously agreed upon plans. Following the signing of the agreements in October 2008, the site's cleanup and redevelopment were back on track.

## 2008 – 2011+

### *Coordinating Cleanup and Reuse...*

Since late 2008, the project's key parties have been working hard to coordinate cleanup and redevelopment.

The City signed a fixed-price contract with long-time site environmental consultant ARCADIS to implement the majority of EPA's selected remedy. After ARCADIS satisfies the contract requirements, the City will then be responsible for any additional cleanup activities needed, including long-term monitoring. The City has been pursuing opportunities to recoup site cleanup costs. For example, the City's updated 2009 BSRA with FDEP qualified the City for voluntary cleanup tax credits that permit the deduction of up to \$500,000 per year in site cleanup costs and provides state liability protections.

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*"The site's cleanup and reuse protect public health and provide community benefits, and will pay for itself over the long term."*

*– Assistant City Attorney Kyle Shephard*

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"The City of Orlando understands that cleaning up the site and recouping cleanup costs is a long-term process," said Assistant City Attorney Kyle Shephard. "More importantly, it is the right thing to do. The site's cleanup and reuse protect public health and provide community benefits, and will pay for itself over the long term."

In terms of reuse, OS Complex, Inc. and LHPS developed detailed plans for a new ball field, practice fields and parking on Tract B, with future planned uses to include a gymnasium and a maintenance facility. The school parties were also able to coordinate with ARCADIS to integrate reuse plans with cleanup planning. The site contractor designed the site's bioremediation system so that all piping and equipment would be buried underground, underneath LHPS' new ball field complex and connected to a single delivery line. This design has permitted optimal recreational use of the area while ground water contamination is being remediated. "The site contractor has gone above and beyond with their work at the site," said EPA project manager Bill Denman. "Cleanup and reuse have been seamlessly integrated." Finally, the school parties discussed their plans with neighborhood organizations, addressing most community concerns, including the development of a non-intrusive field lighting system designed to minimize glare.



*Community meeting, 2008.*

EPA and FDEP continued to closely monitor the site's cleanup plans. The site contractor submitted a remedial action work plan, an environmental health and safety plan, and sampling and analysis plans in 2009. In September 2010, EPA modified the site's remedy with an Explanation of Significant Difference (ESD) following extensive field design work. The ESD incorporated electrical resistance heating to address contaminants in fine-grained soils and the ground water plume.

The site's cleanup work plan was also finalized in September 2010. Implementation of the site's remedy began in early 2011, with completion of cleanup activities anticipated in 2014, to be followed by a period of post-remediation monitoring. The construction of the new LHPS ball field and practice fields was



completed in late 2010; the first baseball game was played on site in January 2011.

“The school’s ability to begin improvements during the implementation of the cleanup was a wonderful bonus to the neighborhood,” said City Commissioner Robert Stuart. “It meant that a long-vacant and unattractive property could be brought back to life far more quickly than anyone anticipated. The school’s new athletic complex is a neighborhood asset instead of an eyesore.”

### **...Looking Back, Looking Forward**

The City’s voluntary cleanup approach followed the eventually unsuccessful multi-year pursuit of a private third-party cleanup. Since cities rely on taxpayer dollars for their funding, it also meant there would be a need to somehow recoup site cleanup costs from property sales, tax credits and other sources. This successful cleanup and redevelopment project clearly demonstrates the importance of combining flexibility, creativity, problem-solving skills, and the ability to draw on a wide range of expertise with strong, continuous efforts to engage the community and coordinate between numerous government agencies.

For the community, LHPS’s acquisition of Tract B and subsequent recreational redevelopment has provided a visually appealing, low-impact facility in place of vacant lands. It has also meant that the mix of uses outlined in the community’s 2000 Development Plan for the area will not happen exactly as planned. Some see this as a missed opportunity, while others see longer-term value in past community initiatives. “The [planning] process was still useful,” said Lake Formosa Neighborhood Association representative Gordon Spears. “We forged important political relationships and it put us on the radar screen as neighborhoods that cared about the area. The school’s recreation area is there now as well, which was part of the plan. Keep in mind, too, [that] our number one goal has always been the site’s cleanup. Our persistence has paid off.”

Indeed, persistence may yet yield additional benefits. With the City already at work on the neighboring SunRail commuter rail system, some mixed uses – homes, commercial space, parking – may be located on remaining Lake Highland property parcels in the foreseeable future, addressing the long-standing local priorities reflected in the community’s 2000 Development Plan. Not only will the new development help support the City’s new transit options, it will also complement the surrounding mix of land uses and add to the tax base within the City’s downtown tax increment financing district.

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*“The school’s ability to begin improvements during the implementation of the cleanup was a wonderful bonus to the neighborhood.”*

*– City Commissioner Robert Stuart*

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“The Lake Highland project proves that even highly complex environmental challenges, involving numerous public and private stakeholders, can be resolved by committed partnerships,” stated Mayor Dyer. “We are also reminded that smart land use planning principles are key to advancing environmental protection, and this is why EPA and local governments are natural partners.”

Looking back, the project has been guided and spurred by a spirit of innovation, creativity and exploration; coordination among local, state and federal partners; local government and community leadership; technical, legal and financing expertise; and supportive state and federal policies and incentives. The outcome is the successful cleanup of the Former Spellman Engineering site and recreational reuse at the Lake Highland property.



# Former Spellman Engineering: The Story in Pictures

## Pre-Cleanup

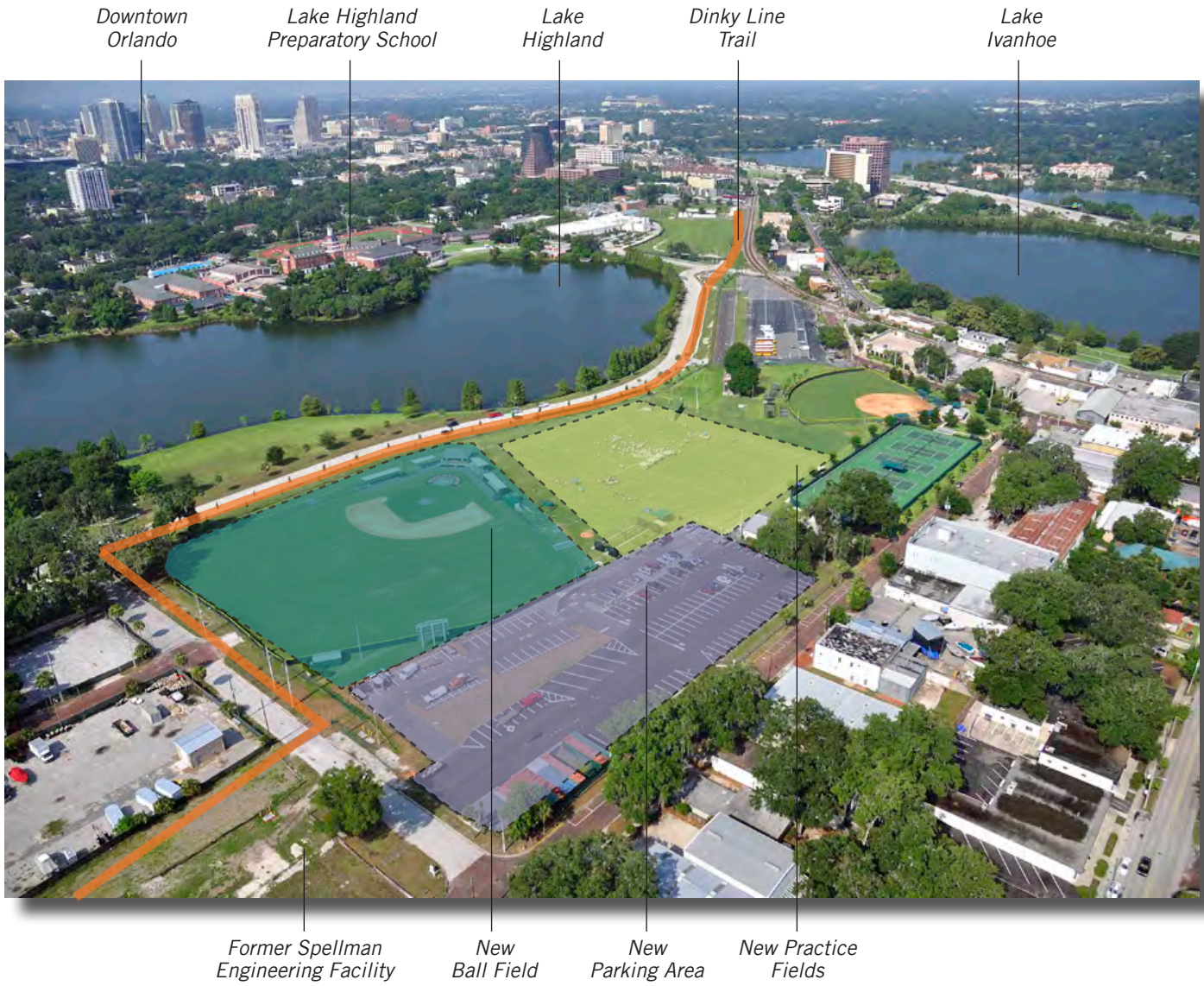


## Cleanup Design and Implementation (2011)





# In Reuse (2011)



Entrance to the LHPs Mark O'Meara Family Sports Complex.



New ball field in action, 2011.



# Lessons Learned

Participants agree that a combination of significant factors have contributed to the project's successful outcomes.

- The site's proximity to community resources and location near downtown Orlando meant that cleanup and redevelopment were high priorities.
- The City and OUC consistently pursued the site's cleanup and redevelopment over the long term. The City's willingness to voluntarily clean up the site following unsuccessful private third-party attempts ensured that EPA did not need to list the site on the NPL.
- The local community came together to develop reuse plans that informed cleanup and redevelopment planning. Community members also provided feedback to key parties throughout the process.
- LHPS was an engaged, motivated partner that developed feasible plans and brought together the technical, legal and financing expertise needed to develop its recreational facilities.
- EPA and FDEP understood community priorities in the context of the site's cleanup, supporting the City's efforts while emphasizing a timely site cleanup.
- Coordination of the site's cleanup design with the design of the new LHPS ball fields meant that cleanup and redevelopment could move forward at the same time.
- All parties involved were patient and flexible, recognizing that cleanup and redevelopment are complex processes reliant on available resources, multiple parties, site contamination and other factors.

## ***The Bigger Picture***

While these site-specific conditions created an ideal climate for successful reuse outcomes, there are also a range of broader lessons learned that can help guide similar projects at contaminated lands across the country.

**EPA works closely with communities, site owners and other stakeholders to support reuse outcomes that are compatible with site cleanups.**

The Agency places a high priority on supporting the return of contaminated sites to productive and beneficial uses. In Orlando, the City and LHPS were able to work with EPA and FDEP and the community to identify cleanup and redevelopment opportunities. When the originally planned private third-party approach to address the site did not work out, the agencies worked with local stakeholders to identify an alternative way forward that supported the cleanup and desired reuse outcomes.

## **EPA and Reuse: Lessons Learned**

Since the inception of the Superfund program, EPA has been building on its expertise in conducting site characterization and remediation to ensure that contamination is not a barrier to the reuse of property. Today, consideration of future use is an integral part of EPA's cleanup programs, from initial site investigations and remedy selection through to the design, implementation, and operation and maintenance of a site's remedy.

"At older sites, EPA did not focus on taking reuse considerations into account early in the cleanup process," reflected EPA's Matthew Mankowski, a former project manager at Superfund sites. "Today, that has changed. Superfund cleanups can be very creative and flexible in allowing for future site uses, but that information needs to be plugged in early to be as effective as possible."

At the Former Spellman Engineering site, future land use considerations were able to inform city contractor ARCADIS' design of the site's remedy. The site's bioremediation system was designed so that all piping and equipment would be buried underground, underneath LHPS' new ball field complex, and connected to a single delivery line. This design optimized recreational use of the area while remediation continued.

EPA also works with site stakeholders to consider how future land use considerations can inform the implementation and long-term stewardship of site remedies *as well as* cleanup planning. At some sites, for example, reuse considerations can inform the future location of ground water monitoring wells and other operation and maintenance equipment that might inadvertently hinder redevelopment efforts. At other sites, detailed site reuse plans have provided additional benefits that save time and reduce redevelopment costs. For example, future utility corridors or building footers can be installed in coordination with site cleanup activities.

**While EPA provides tools and resources to support Superfund reuse, communities and public and private sector organizations make it happen.**

EPA's mission is to protect human health and the environment. EPA relies on engaged community stakeholders to bring their future land use goals and priorities to the table so that this information can be incorporated into the remedial process, linking cleanup and redevelopment. "The City showed initiative by voluntarily undertaking site investigations and then the site's cleanup," said EPA project manager Bill Denman. "And with the community's Development Plan in place, we [EPA and FDEP] had a good understanding of local reuse priorities."

**Voluntary cleanups at contaminated lands like Superfund sites are a powerful tool that can protect human health and the environment without requiring site listing on the NPL.**

EPA and state and local agencies can identify opportunities for stakeholder leadership during initial site investigations, feasibility studies and baseline risk assessments. As in Orlando, voluntary cleanups work extremely well when local governments own contiguous, non-source properties which will retain significant value after cleanup, the cleanup costs are not prohibitively greater than the value of the property, and site cleanup does not significantly restrict potential future site uses. In addition, faster and lower-cost cleanups may be possible at some sites. When efforts fail to find either responsible parties or volunteers who will clean up a site, NPL listing remains one of EPA's most effective tools for addressing the nation's worst hazardous waste sites.

**For EPA site teams, early engagement with regional office management, Headquarters staff and other federal agencies can be key to ensuring timely responses for necessary reviews and approvals, particularly when considering new tools and approaches.**

Coordination for the Former Spellman Engineering site led to the site's interlinked agreements, including the groundbreaking CPO agreement that enabled a non-liable adjacent property owner (the City) to voluntarily clean up a Superfund site. EPA's southeast regional office coordinated closely with EPA Headquarters as well as the U.S. Department of Justice to develop and approve the agreement, which provided the City with a covenant not to sue in return for cleaning up the site.

**Local governments can play a unique leadership role in cleanup and redevelopment projects.**

As the organizations responsible for their communities' general welfare, local governments are particularly well-positioned to host redevelopment projects, bring together diverse stakeholders to discuss site cleanup and reuse opportunities, and use planning tools and incentives to foster positive site outcomes. In Orlando, when the third-party approach proposed for the site became unviable, the City's willingness to voluntarily clean up the site enabled the project to move forward.

**The design of site remedies can reflect and incorporate plans for a site's reasonably anticipated future land use.**

Site contractor ARCADIS designed the site's bioremediation system so that all piping and equipment would be buried underground, underneath LHPS' new ball field complex, and connected to a single delivery line, allowing for site remediation while optimizing the property's land area for recreational use. EPA's 2010 ESD for the site provided the technical flexibility

needed for the contractor's approach, while also updating the remedy to reflect current environmental conditions.

**Projects at contaminated lands can be complex undertakings that require diverse expertise.**

The project required significant legal, technical, financial and policy expertise. The City and the school parties each brought in specialized expertise as needed throughout the process. In addition, by continuing to work with the same long-time environmental consultant, the parties benefited from the continuity the consultant provided, as well as its expertise and experience facilitating redevelopment projects across Florida.

**Build on past experience.**

Parties at the Former Spellman Engineering site charted new territory in addressing stigma and other site issues. Today, thanks to the changes to CERCLA when the bona fide prospective purchase (BFPP) provisions of the 2001 Brownfields Revitalization Act were added, the availability of environmental insurance and newly-developed EPA tools like the site's CPO Agreement and Ready for Reuse (RfR) Determinations, resources for redevelopment are more widely available. Prospective purchasers can contact EPA site teams to learn more, or see the Resources section on the next page for additional information.

## Conclusion

The recent history of the Former Spellman Engineering Superfund site illustrates how early engagement, community leadership, collaborative partnerships and flexible long-term planning can protect human health and the environment and enable site reuse. Today, the City's voluntary cleanup of the site is underway. At the same time, LHPS has been able to return 18 acres of the Lake Highland property to productive use, providing much-needed sports fields and parking. Looking longer term, the City and OUC are exploring opportunities for remaining portions of the property to encourage mixed-use redevelopment near public transit facilities.

In Orlando, Florida, the local government has led a complex redevelopment project that has brought the community together with diverse organizations and partners. In turn, the City and EPA's shared initiative has led to a voluntary cleanup of the site and new opportunities, providing one of the leading examples of how early engagement in the Superfund process can lead to the protection of human health and the environment and redevelopment success.

# Engaging Early in the Superfund Process, Enabling Cleanup and Reuse

THE FORMER SPELLMAN ENGINEERING SITE IN ORLANDO, FLORIDA

## Sources and Resources

### Sources

Images and maps for this case study were obtained from EPA Region 4, FDEP, the City of Orlando, LHPS and site visits.

### Resources

EPA CERCLIS site profile, including site decision documents:

[cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0406763](http://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0406763)

EPA Superfund Redevelopment Initiative:

[www.epa.gov/superfund/programs/recycle](http://www.epa.gov/superfund/programs/recycle)

2001 Brownfields Revitalization Act and BFPP information:

[www.epa.gov/brownfields/aai/aaicerclafs.pdf](http://www.epa.gov/brownfields/aai/aaicerclafs.pdf)

Environmental insurance information:

[www.epa.gov/brownfields/insurance](http://www.epa.gov/brownfields/insurance)

City of Orlando Former Spellman Engineering site web page:

[www.cityoforlando.net/Spellman](http://www.cityoforlando.net/Spellman)

Lake Highland Preparatory School:

[www.lhps.org](http://www.lhps.org)

Park/Lake Highland Neighborhood Association:

[www.plhna.com](http://www.plhna.com)

Lake Formosa Neighborhood Association:

[www.lakeformosana.org](http://www.lakeformosana.org)



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