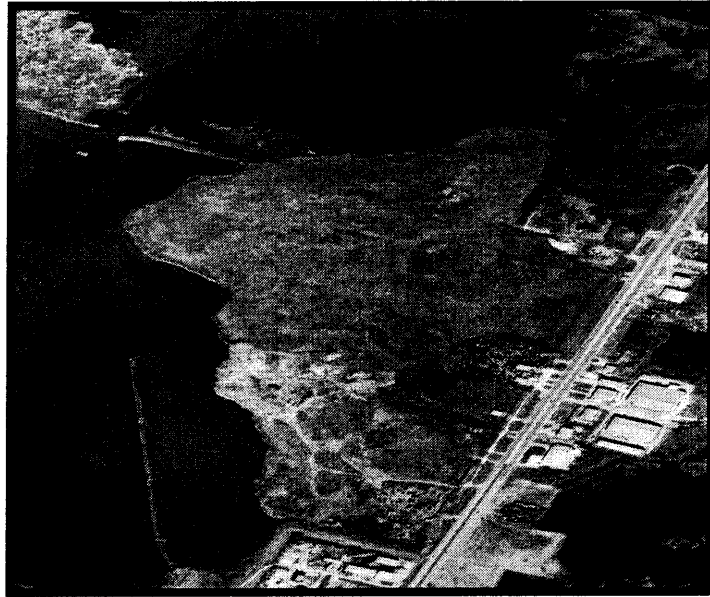


***ST. BERNARD PARISH  
CLEANUP AND REDEVELOPMENT PLAN  
OLD PARIS ROAD LANDFILL***



**Prepared for**



**REGIONAL PLANNING COMMISSION  
BROWNFIELDS REDEVELOPMENT MODEL**

**Prepared by**



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**St. Bernard Regional Brownfields Project  
Old Paris Road Landfill Site  
Cleanup and Redevelopment Plan**

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## **ES – Executive Summary**

Urban Planning & Innovations, Co. (UPI) prepared the *St. Bernard Regional Brownfields Project – Old Paris Road Landfill Site Cleanup and Redevelopment Plan*, under the direction of Camp Dresser & McKee (CDM), the Regional Planning Commission (RPC) and the Louisiana Department of Environmental Quality (LDEQ).

The project site located on Paris Road in Chalmette, LA and is approximately one hundred (100) acres in size. It is located in an area that is primarily industrial in nature and is surrounded by water on most of its sides.

The landfill site was originally part of the Versailles Subdivision but was never developed for residential use. The parish began operating a landfill at the site in 1946. During the course of the landfill's history, there were several enforcement violations issued for the site. In 1986, under a Closure Compliance Order issued by the LDEQ, the parish closed the landfill and it has not been operation since then.

Phase I and Phase II Environmental Site Assessments were conducted for the landfill site during 2001-2003. It was concluded that the landfill's cover system was in relative good condition, despite areas where it had been damaged. It was recommended that the existing cover system or cap be increased by an additional two (2) feet in order to contain any potential contaminants present at the site.

A variety of reuses have been proposed for the landfill site since its closure in the late 1980's. Many of these proposed reuses include: festival fairgrounds; flea markets; recreation facilities; a golf course and a riverboat gaming facility. St. Bernard Parish officials have continued to express the need for a large recreational facility in the parish. The landfill site has been identified as the most desirable location in the parish to accommodate such a need. The project site, approximately 100 acres, has the potential to accommodate many recreational uses such as bike paths, fitness trails, sports fields, playgrounds, etc. as well as festival fairgrounds.

The redevelopment of the project site is proposed to occur in three (3) phases over an unspecified period of time. Each phase indicates a gradual increase in use and intensity of the site. It should be noted that the proposed redevelopment plans and cost estimates presented in this report are conceptual and based on approximate figures. In order to ensure the exact location, size, topography of the project site, an official survey of the area should be conducted. This will also aid with the planning of the project site's redevelopment.



**St. Bernard Parish Regional Brownfields  
Paris Road Landfill Site  
Proposed Project Site**



0 300 600 Feet



## **1.0 Introduction**

Urban Planning & Innovations, Co. (UPI) prepared the *St. Bernard Regional Brownfields Project – Old Paris Road Landfill Site Cleanup and Redevelopment Plan*, under the direction of Camp Dresser & McKee (CDM), the Regional Planning Commission (RPC) and the Louisiana Department of Environmental Quality (LDEQ). The RPC funded the plan under their Brownfields Redevelopment Model program.

### **1.1 Purpose**

The purpose of this plan is to discuss cleanup of the landfill site as well as its redevelopment opportunities. Proposals and suggestions contained therein are based upon input received from representatives of the St. Bernard Parish President's office as well as RPC staff. UPI's scope of work included the following tasks:

- Discussion of the landfill site's cleanup;
- Opinion of Probable Cost for cleanup;
- Discussion of redevelopment opportunities;
- Discussion of innovative, non-intrusive technologies that can be incorporated in the site's redevelopment plans; and
- Opinion of Probable Cost for redevelopment.

## **2.0 Site Description and History**

This section contains the legal description of the subject site as well as its history, including current and past land use. It also contains a description of the land uses within the vicinity of the subject site.

### **2.1 Location and Legal Description**

The Old Paris Road Landfill site is located in Chalmette, Louisiana (St. Bernard Parish), approximately seven (7) miles southeast of New Orleans. The street address is 5039 Paris Road, or LA Highway 47. The precise geographic coordinates of the site are as follows: Latitude 29° 8' 0.1" North, Longitude 89° 57' 7.9" West. The entire landfill is approximately 100 acres in size.

### **2.2 Site and Vicinity Characteristics**

The landfill site is located on the outskirts of a more densely developed area that contains a mixture of commercial, light and heavy industrial uses, warehousing, and manufacturing facilities. The land surrounding to the subject site is primarily vacant and undeveloped, with the exception of an automobile salvage/storage yard immediately adjacent to the site. The landfill site is a large, triangular plot of elevated land with short-cropped grass over much of the area. There are no buildings at the site; however, there is a construction and demolition debris transfer station near the front of the property, facing Paris Road.



*View of the landfill from Paris Road.*

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**2.3 Site History and Land Use**

Prior to use as a landfill, the subject site was part of the Versailles Subdivision. The area never developed for residential use and was converted into a landfill around 1946. In the ensuing years, the landfill operated as an open dump that had a significant enforcement history. Records review in the Phase I Environmental Site Assessment (ESA) indicated that the site had violations for disposing of solid waste in wetlands; open burns and fires; daily cover requirements; disposal of liquid wastes; failure to spread and compact solid wastes in layers of two (2) feet; failure to provide proper drainage and failure to provide controlled access to the facility.

In April 1985, the landfill was ordered to close under a Closure Compliance Order. As per a Settlement Agreement between the State of Louisiana and St. Bernard Parish, the landfill was closed to all incoming waste on July 31, 1986. In June of 1987, the parish received bids to provide the final cover for closure and, during the following February, a final Closure Inspection and Settlement Agreement on the accumulated penalties were executed. The parish was allowed to utilize a 6.6-acre portion of the site as the demolition debris transfer station as described in the previous section.



*Entrance to the demolition debris/transfer station at the former landfill.*

### **3.0 Summary of Environmental Site Assessments (ESA)**

This section contains a summary of ESA's performed at the subject site as well as other applicable environmental studies and/or reports.

#### **3.1 Phase I ESA**

Hartman Engineering, Inc. (HEI) conducted a Phase I ESA for the landfill site, under contract to the RPC as part of the RPC's Brownfields Redevelopment Model program. Their findings were presented in the report titled *St. Bernard Parish: Old Paris Road Landfill ESA, May 2001*. HEI reported that the landfill site has a significant enforcement history with violations including the disposal of solid waste in wetlands, open burns and fires, daily cover requirements, disposal of liquid wastes, failure to spread and compact solid waste in layers of two (2) feet, failure to provide proper drainage and failure to provide controlled access to the facility.

HEI concluded that a full Phase II ESA of the closed landfill would be "expensive" and recommended that a modified Phase II ESA and geotechnical exploration be conducted to determine the relative thickness of the cover and underlying layers.

#### **3.2 Phase II ESA**

Materials Management Group, Inc. (MMG) conducted a modified Phase II ESA including a field/site investigation, under contract to the U.S. Army Corps of Engineers (USACE). This was completed in conjunction with a Phase I ESA for the incinerator and main yard road site, also in St. Bernard Parish. Their findings reported in *Final Report: St. Bernard Landfill Investigation Report: Old Paris Landfill – Chalmette, LA. July 15, 2002*. The purpose of this report was to assess the integrity of the landfill's existing cap.

MMG reported that, overall, the cap appeared to be in good condition, despite areas where it had been compromised or damaged due to trucks, weather conditions, or wildlife at the site. Based upon their field investigations, MMG made the following recommendations: 1) that the landfill property boundaries should be clearly marked and that the areas where trash has been dumped be cleaned and recapped; 2) areas where the cap has been compromised, the cap should be replaced and/or thickened; and 3) the steep areas of the landfill should be graded and any holes should be filled.

#### **3.3 Miscellaneous Reports**

Burk & Associates, Inc. prepared the *St. Bernard Parish Landfill Operational and Security Plan for Disposal of Construction and Demolition Debris Land Clearing Wastes and Woodwastes* in 1987. This plan was prepared for the St. Bernard Parish Police Jury and submitted to the LDEQ. The purpose of this plan was to document the procedures

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and safeguards that would be utilized by St. Bernard Parish Police Jury for the receipt, handling and disposal, in an environmentally sound manner of certain solid wastes at the demolition debris transfer station (the 6.6-acre site).

The plan provided a detailed description of the landfill's topography as well as its geology and drainage capabilities. Per the LDEQ stipulations, the landfill, which had been closed, was only authorized to handle and dispose of the following solid wastes: non-hazardous construction and demolition debris; woodwaste such as wood residue, cutoffs, wood chips, sawdust, etc.; and tree limbs, leaves, stumps and other wastes resulting from land clearing. The plan also included operational procedures for the 6.6 acre-portion of the landfill that was allowed to remain open.

## **4.0 Site Cleanup**

This section contains a description of the cleanup history of the subject site, cleanup requirements as per the LDEQ, proposed cleanup action for the subject site, cost estimates for cleanup and a discussion relative to unobtrusive innovative technologies that can be utilized for cleanup and/or redevelopment of the site.

### **4.1 Cleanup History**

The landfill site has a history of enforcement violations for the following: disposal of solid waste in wetlands, open burns and fires, daily cover requirements, disposal of liquid wastes, failure to spread and compact solid waste in layers of two (2) feet, failure to provide proper drainage and failure to provide controlled access to the facility.

In 1987, the parish received bids from several companies to provide a final cover or cap over the entire landfill site in an effort to comply with the Settlement Agreement for permanent closure of the site. The closure of the landfill site involved the installment of a two-foot clay cap, a perimeter fence, monitoring wells and vegetation with erosion controls for the entire site.

### **4.2 Cleanup Requirements**

The LDEQ has issued requirements that must be met in order for the landfill site to be redeveloped as either a recreational facility or any other proposed use:

- The current cap at the site will be increased in depth to protect the public from any potential exposure to the underlying waste.
- No piles, structures, utility wires or piping will penetrate the cap and make contact with the waste.
- No permanent structures will be placed over the waste without adequate ventilation beneath, in order to avoid trapping methane gas and posing a health/safety risk to the public.
- The site cap will be re-graded and maintained on a year –round basis so that low spots, due to uneven settling, can be filled and cap integrity can be maintained.

### **4.3 Proposed Cleanup**

According to the EPA, several factors need to be taken into consideration when planning containment or cleanup remedies for former landfill sites, particularly those considered for recreational redevelopment such as the settlement and management of gases that may form underneath the cover system or cap. Also differential settlement of the land may result in an uneven surface area thus making athletic fields unusable. Other factors to consider include surface vegetation, storm water management, managing the penetration of the cap, avoiding accidental intrusion, and the on-site construction of paved surfaces, buildings and utilities.

As indicated in the modified Phase II ESA, the landfill's existing cap is in relatively good condition; however, there are portions where it has been compromised, most likely from heavy equipment such as bulldozers or trucks. The report also indicated that there were apparent encroachment issues with adjacent uses (the auto salvage yard) and existing trash on the site itself – an empty underground storage tank.

There are several remediation methods that can be utilized in cleaning up former landfill sites. The method that is most appropriate for a site depends on the waste or contaminants in the landfill, as well as cost, effectiveness and the ability to implement the remediation. The purpose of a cover system is to prevent the public from coming into contact with any type of hazardous waste, to prevent the release of hazardous waste to the environment and to minimize surface water infiltration into the waste.

The type of cover system that is utilized in site cleanup is typically determined by the site's redevelopment potential. For example, if a site is to be redeveloped for recreational use, the cover system may consist of fill material such as asphalt or clay and a vegetative cover that may help to prevent erosion of the underlying soil. Grasses are typically used because they have relatively shallow root systems, are well adapted to most local environments and are capable of thriving with limited or no support such as irrigation and fertilization.

As indicated in the previous section, the landfill site has undergone remediation/cleanup with the application of a clay cover system in 1986. Any further cleanup actions taken at the subject site would be for the purpose of redevelopment.

In order to render the landfill site reusable for any new development, particularly a recreational park, several cleanup actions need to be taken. First, the site needs to be cleared of any existing trash that may have been deposited there since the landfill's closure. As per the LDEQ requirements, the cover system should be thickened with an additional layer of two (2) feet of clay or a soil that contains at least 50% clay (clayey soil). Additionally, seeding and fertilizing should occur so that grass or turf suitable for recreational can grow.

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**4.3 Opinion of Probable Cost**

This section contains cost estimates for additional cleanup of the former landfill (approximately 100 acres).

<b>ITEM</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>COST</b>
Topsoil – Spillway Dirt	322,061 cy	\$150.00 per 12 cy	\$4,025,762.50
Hydroseed	4,347,826 sq. ft.	0.18 per sq. ft.	782,608.68
Irrigation	4,347,826 sq. ft.	0.50 per sq. ft.	2,173,913.00
<b>TOTAL</b>			<b>\$6,982,284.20</b>

## **5.0 Proposed Redevelopment**

This section contains a description of past redevelopment proposals for the subject site, support of the proposed redevelopment in local policy and/or land use plans and studies, features of the proposed redevelopment, park development phases, and an opinion of probable cost.

### **5.1 Past Redevelopment Proposals**

A variety of reuses have been proposed for the landfill site since its closure in the late 1980's. Many of these proposed reuses include: festival fairgrounds; flea markets; recreation facilities; a golf course and a riverboat gaming facility. In 1990, the festival fairgrounds proposal gained parish support; however, it failed due to a historically incomplete title search or disputable findings of the existing title search for ownership of the individual lots comprising the entire landfill site. This also prohibited the riverboat gaming facility from being developed at the site.

### **5.2 Support of Proposed Redevelopment in Local Policy and/or Land Use Plans or Studies**

During the course of 2001, several public meetings were held throughout the parish to solicit input for the parish's first land use study. Parish residents discussed various quality of life issues affecting St. Bernard including future growth, preservation of green space, wetlands and the need for increased opportunities for active and passive recreation. Specific suggestions included a regional park, soccer fields, bike paths, neighborhood pocket parks and Mississippi River scenic overlooks. The land use study also included estimates of recreational needs for the parish.

St. Bernard Parish officials have continued to express the need for a large recreational facility in the parish. The landfill site has been identified as the most desirable location in the parish to accommodate such a need. The project site, approximately 100 acres, has the potential to accommodate many recreational uses such as bike paths, fitness trails, sports fields, playgrounds, etc. as well as festival fairgrounds.

Generally, the Environmental Protection Agency (EPA) supports the conversion of former landfills into recreational facilities, provided that the uses do not compromise or adversely affect the performance of the site's remediation or cleanup action. Moreover, the LDEQ has imposed similar provisions, as stated in Section 4.2, with regards to the redevelopment of the landfill site.

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**5.3 St. Bernard Parish Park**

At approximately 100 acres, the St. Bernard Parish Park would be the largest recreational facility in the parish. It is designed to accommodate a range of active and passive recreation activities for parish residents as well as visitors.

**5.4 Park Features**

The proposed park would include, but should not be limited to, the following features:

- *Trails for walking, jogging or hiking* – one of the important features of the proposed park is to provide park users with an opportunity to walk, jog or hike for leisure, relaxation and fitness. The trails provided in the park would offer loop trips of up to one-half (1/2) mile or more. Additionally, a linear trail along the water edge would provide park users with an unobstructed view of the water.



*Trails allow opportunities for fitness, relaxation and leisure.*

- *Sports fields: baseball, soccer, football* - one of the cornerstones of the park is the amount of sports fields that it would provide. Baseball diamonds should be laid out in a cloverleaf formation in order to make the efficient use of space. Enough adult regulation-size soccer fields should be included in the plan in order to support tournament play, as well as opportunities for football fields and practice fields for various sports use.