

Meeting Date: April 12, 2011

Agenda Item 9

REQUESTED COMMISSION ACTION:

Consent Ordinance Resolution Consideration Workshop

SHORT TITLE OR MOTION: A RESOLUTION APPROVING AND AUTHORIZING THE PROPER OFFICIALS TO EXECUTE A PROPOSAL BETWEEN THE CITY OF POMPANO BEACH AND LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES INC.

Summary of Purpose and Why: On May 16th 2002 there was a fire at the Golf Maintenance Building. While extinguishing the fire, fertilizer containing arsenic was dispersed. The City of Pompano Beach has been monitoring the arsenic levels in the groundwater and soil at the site quarterly since and reporting the findings to the Broward County Pollution Prevention, Remediation and Air Quality Division. The contamination levels have not decreased to an acceptable level through natural processes, therefore, it is necessary to remove some of the soil and monitor further. This work will remove the more contaminated areas and test the groundwater.

QUESTIONS TO BE ANSWERED BY ORIGINATING DEPARTMENT:

- (1) Origin of request for this action: Staff
- (2) Primary staff contact: Robert McCaughan/ Alessandra Delfico, PE Ext 4061 / 4144
- (3) Expiration of contract, if applicable: NA
- (4) Fiscal impact and source of funding: \$56,300 Account 482-48-20-576-46.10

DEPARTMENTAL COORDINATION	DATE	DEPARTMENTAL RECOMMENDATION	DEPARTMENTAL HEAD SIGNATURE OR ATTACHED MEMO NUMBER
Public Works	<u>3/28/11</u>	<u>APPROVE</u>	<u>Robert McCaughan</u>
Budget	<u>3/29/11</u>	<u>Approve</u>	<u>J. Sibbl</u>
Finance	<u>3/29/11</u>	<u>Approve</u>	<u>Memo 2011-848</u>
Legal	<u>3/21/11</u>	<u>Approve</u>	<u>[Signature]</u>

- Advisory Board
- Development Services Director
- City Manager

[Signature]

ACTION TAKEN BY COMMISSION:

<u>Ordinance</u>	<u>Resolution</u>	<u>Consideration</u>	<u>Workshop</u>
1st Reading	1st Reading	Results:	Results:
_____	_____	_____	_____
2nd Reading	_____	_____	_____
_____	_____	_____	_____




City Attorney's Communication #2011-848

March 21, 2011

TO: Alessandra Delfico, P.E., Civil Engineer

FROM: Jill R. Mesojedec, FRP, Paralegal


VIA: Gordon B. Linn, City Attorney 

RE: Langan Engineering Remedial Action and Site Assessment for the Municipal Golf Course

Pursuant to your memorandum dated March 16, 2011, Engineering Department Memorandum No. 11-133, I have prepared and attach the following form of Resolution:

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF POMPANO BEACH, FLORIDA, APPROVING AND AUTHORIZING THE PROPER CITY OFFICIALS TO EXECUTE A PROPOSAL FOR REMEDIAL ACTION AND SITE ASSESSMENT AT THE POMPANO BEACH GOLF COURSE BETWEEN THE CITY OF POMPANO BEACH AND LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC.; PROVIDING AN EFFECTIVE DATE.

Please ensure that the proper city signature pages are attached to the agreement prior to submitting the resolution to the City Commission. If I may be of further assistance, please feel free to contact me.


JILL R. MESOJEDEC

/jrm
l:cor/engr/2011-848

Attachment

RESOLUTION NO. 2011-_____

CITY OF POMPANO BEACH
Broward County, Florida

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF POMPANO BEACH, FLORIDA, APPROVING AND AUTHORIZING THE PROPER CITY OFFICIALS TO EXECUTE A PROPOSAL FOR REMEDIAL ACTION AND SITE ASSESSMENT AT THE POMPANO BEACH GOLF COURSE BETWEEN THE CITY OF POMPANO BEACH AND LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC.; PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF POMPANO BEACH, FLORIDA:

SECTION 1. That an Agreement between the City of Pompano Beach and Langan Engineering and Environmental Services, Inc., a copy of which Agreement is attached hereto and incorporated by reference as if set forth in full, is hereby approved.

SECTION 2. That the proper City officials are hereby authorized to execute said Agreement between the City of Pompano Beach and Langan Engineering and Environmental Services, Inc.

SECTION 3. This Resolution shall become effective upon passage.

PASSED AND ADOPTED this _____ day of _____, 2011.

LAMAR FISHER, MAYOR

ATTEST:

MARY L. CHAMBERS, CITY CLERK



15 March 2011

By email to Alessandra.Delfico@copbfl.com

Alessandra Delfico, P.E.
Interim City Engineer
City of Pompano Beach Engineering Department
1201 Northeast 5th Avenue
Pompano Beach, Florida 33060

David T. Guckel, P.E., P.P.
George P. Kelley, P.E.
George L. Denick, P.E.
Michael A. Semeraro, Jr., P.E.
Nicholas De Rose, P.G.
Andrew J. Garcia, P.E.
George E. Leventis, P.E.
Rudolph P. Firzzi, P.E., G.E.
Ronald A. Fuerst, C.L.A.
Colleen Costello, P.G.
Cristina M. Gonzalez, P.E.
Gerald J. Zambrella, C.E.M.
Gregory M. Elko, P.E.
Steven Ueland, P.E.

Roger A. Archabal, P.E.
Matthew E. Meyer, P.E.

Eric B. Schwarz, P.E.
Vincent D. Varina, P.G.

**Re: Proposal for Remedial Action and Site Assessment
Pompano Beach Municipal Golf Course
1401 North Federal Highway
Pompano Beach, Florida 33060
EAR License No. 0639
Langan Proposal No.: 300065802**

Dear Ms. Delfico:

Langan Engineering & Environmental Services is pleased to present to the City of Pompano Beach (the Client) our proposal to conduct a remedial action for arsenic-contaminated soil in the maintenance area and a site assessment arsenic-contaminated ground water at the property boundary of the Pompano Beach Municipal Golf Course at 1401 North Federal Highway, Pompano Beach, Florida. The services are necessary to fulfill the City's objectives of achieving a No Further Action with Conditions closure for the arsenic contamination.

BACKGROUND

On 14 January 2011, Langan submitted a *Soil Investigation Report/No Further Action with Controls Plan*, which evaluated historical soil analytical data from the maintenance yard. The report stated,

Maintenance Area Soil

Handex collected soil samples in the maintenance yard during 2003 and 2004. Appendix A contains a figure showing the 39 sample locations.

0-to-2-foot Depth Interval

The following table contains the sample IDs that Langan used to calculate the 95% UCL for this depth interval in the maintenance yard:

Maintenance Yard (0 to 2 ft)					
Sample ID	As (mg/kg)	Qualifier	Sample ID	As (mg/kg)	Qualifier
MW-16	0.697		MW-41	4.98	
MW-17	15.1		MW-42	10.4	
MW-18	0.645		MW-43	0.25	
MW-19	12.9		MW-44	0.737	
MW-20	9.47		MW-45	7.53	
MW-21	0.932		SB-1	0.945	
MW-22	0.490	U	SB-10	1.68	
MW-23	0.459	U	SB-11	7.05	
MW-24	0.446	U	SB-12	1.13	
MW-25	0.459	U	SB-2	8.81	
MW-26	1.11		SB-3	0.712	
MW-27	3.23		SB-4	3.33	
MW-28	258		SB-5	0.612	
MW-29	43.1		SB-54 I	22.3	
MW-30	3.3		SB-55 I	0.616	
MW-36	3.32		SB-6	1.9	
MW-37	16		SB-7	6.75	
MW-38	1.35		SB-8	2.46	
MW-39	1.07		SB-9	5.69	
MW-40	0.548				

Using the Florida UCL tool, Langan calculated that the 95% UCL for this depth interval in the maintenance yard is 19.93 mg/kg. Langan identified two locations at which arsenic exceeded three times the DEC/I SCTL of 12 mg/kg: MW-28 (258 mg/kg) and MW-29 (43.1 mg/kg). Langan recalculated the 95% UCL by removing these two values; the revised 95% UCL is 8.10.

2-foot-to-4-foot Depth Interval

The following table contains the sample IDs that Langan used to calculate the 95% UCL for this depth interval in the maintenance yard:

Maintenance Yard (2 ft to 4 ft)					
Sample ID	As (mg/kg)	Qualifier	Sample ID	As (mg/kg)	Qualifier
MW-16	20.7		MW-41	10.5	
MW-17	4.9		MW-42	0.81	
MW-18	1.05		MW-43	0.783	
MW-19	8.08		MW-44	3.11	
MW-20	1.93		MW-45	6.02	
MW-21	26.5		SB-1	3.12	
MW-22	1.8		SB-10	28.9	
MW-23	7.15		SB-11	14.3	
MW-24	4.03		SB-12	7.06	
MW-25	30.4		SB-2	2.44	
MW-26	1.88		SB-3	1.56	
MW-27	9.77		SB-4	0.672	
MW-28	41.4		SB-5	2.27	
MW-29	1.55		SB-54 I	158	
MW-30	0.646		SB-55 I	1.67	
MW-36	5.74		SB-6	0.863	
MW-37	6.49		SB-7	1.14	
MW-38	0.491		SB-8	1.61	
MW-39	2.53		SB-9	23.8	
MW-40	7.45				

Using the Florida UCL tool, Langan calculated that the 95% UCL for this depth interval in the maintenance yard is 18.47 mg/kg. Langan identified two locations at which arsenic exceeded three times the DEC/I SCTL: MW-28 (41.4 mg/kg) and SB-54I (158 mg/kg). Langan recalculated the 95% UCL by removing these two values; the revised 95% UCL is 11.88.

Golf Course Soil

Handex collected 10 soil samples SB-46 through SB-53. Langan collected 30 soil samples on the tees, greens, and roughs.

0-to-2-foot Depth Interval

The following table contains the sample IDs that Langan used to calculate the 95% UCL for this depth interval on the golf course:

Golf Course (0 to 2 ft)					
Sample ID	As (mg/kg)	Qualifier	Sample ID	As (mg/kg)	Qualifier
G11-Pines	0.92		T11-Pines	6.58	
G13-Palms	0.383		T13-Palms	4.75	
G17-Pines	6.64		T17-Pines	11.1	
G18-Palms	0.549	U	T18-Palms	7.84	
G1-Pines	0.582	U	T1-Pines	5.12	
G3-Pines	1.06		T3-Pines	12.9	
G5	2.24		T5	5.71	
G5-Palms	1.15		T5-Palms	13.2	
G8	3.67		T8	5.74	
G8-Palms	0.652	U	T8-Palms	13.9	
R11-Pines	0.660	U	SB-46	0.82	
R13-Palms	3.13		SB-47	1.53	
R17-Pines	4.86		SB-48	0.479	U
R18-Palms	1.91		SB-49	0.483	U
R1-Pines	1.59		SB-50	0.562	U
R3-Pines	4.31		SB-50 I	0.489	U
R5	4.03		SB-51	0.701	
R5-Palms	0.276		SB-51 I	0.519	U
R8	3.14		SB-52	0.512	U
R8-Palms	5.08		SB-53	0.514	U

Using the Florida UCL tool, Langan calculated that the 95% UCL for this depth interval in the golf course is 6.10 mg/kg. Appendix C contains the UCL calculations. Because 6.10 mg/kg is less than the DEC/I SCTL of 12 mg/kg, Langan compared the analytical data to the DEC/I SCTL and identified two locations at which arsenic exceeded the DEC/I SCTL at this depth interval: T3-Pines (12.9 mg/kg) and T5-Palms (13.2 mg/kg). However, these concentrations do not exceed three times the DEC/I SCTL.

2-foot-to-4-foot Depth Interval

The following table contains the sample IDs for this depth interval on the golf course:

Golf Course (2 ft to 4 ft)		
Sample ID	As (mg/kg)	Qualifier
SB-46	0.593	
SB-47	0.805	
SB-48	0.503	U
SB-49	0.499	U
SB-50	0.482	U
SB-50 I	0.505	U
SB-51	0.506	U
SB-51 I	0.521	U
SB-52	0.503	U
SB-53	0.795	

Langan did not calculate the 95% UCL for this depth interval because only 10 samples were available and because the analytical results were less than the DEC/I SCTL.

Langan believes that additional field work is not necessary because laboratory analysis indicates that arsenic in soil either does not exceed the DEC/I SCTL or does not exceed three times the DEC/I SCTL.

Ground Water

At the request of EPD, and on behalf of the City of Pompano Beach, Langan submitted a Groundwater Investigation Report, dated 13 October 2010. The report summarized the analytical results for samples collected from property boundary wells MW-46, -47, 48, -49R, -50R, IMW-50, MW-51R, IMW-51, MW-53, and MW-56. Laboratory analysis detected arsenic at concentrations exceeding 0.05 milligrams per liter (mg/L) (the site-specific cleanup target level) in MW-48 (0.078 mg/L), MW-51R (0.0827 mg/L), and MW-53 (0.727 mg/L). Laboratory analysis did not detect arsenic at concentrations above the GCTL in the other wells.

The dissolved arsenic in MW-53 is delineated to the north – that is, toward the property boundary with the mall – by MW-56. Laboratory analysis did not detect arsenic in MW-56 at a concentration exceeding the GCTL.

Monitoring wells MW-48 and MW-51R are on the property boundary with the Pompano Beach municipal airport. Because the City of Pompano Beach owns both properties – the golf course and the airport – Langan recommends that, as part of the NFAC Plan discussed in the following paragraphs, the city submit to EPD documentation to the effect that the city accepts that the dissolved arsenic has not been delineated at the airport boundary and that the dissolved arsenic plume might extend onto the airport property.

On 22 February 2011, the Broward County Pollution Prevention, Remediation and Air Quality Division (Division) responded to the Langan report and stated,

Langan recommends delineation of impacted soils followed source removal activities in order to meet the calculated 95% Upper Confidence Limit (UCL) of the Direct Exposure Commercial/Industrial based Soil Cleanup Target Levels (SCTLs) in the maintenance area. The Division does not object to Langan's recommendation. Please conduct recommended actions and provide calculations to demonstrate that the soils within the maintenance area meet the direct exposure commercial/industrial SCTLs upon completion of the recommended actions.

Langan presents results of the 95% UCL calculation for the golf course area (tees, greens, rough areas) and indicates that the soils do not exceed the direct exposure commercial/industrial based SCTLs for these area. Please note that commercial/industrial-based SCTLs are not compatible with the proposed continued exposure scenario of golf course usage. The Division recommends that an Alternative SCTL be calculated for arsenic that utilizes specific exposure assumptions of golf course use. Such exposure assumptions may ultimately be described in a Declaration of Restrictive Covenant.

Based on the results of recently conducted groundwater sampling activities, Langan indicates that the groundwater impacts identified at monitoring well locations MW-48 and MW-51R are not delineated and may extend westward into the part of the property that is currently being used as the Pompano Beach Municipal Airport. Based on the available information, additional groundwater assessment activities are warranted to delineate the impacts identified at MW-48 and MW-51R locations.

Attachment A contains the regulatory correspondence.

This change order presents the proposed scope of work and cost estimate to respond to the Division's request.

SCOPE OF WORK

Langan will conduct field activities according to the Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (rev. March 2008). Palm Beach Environmental Laboratories (PBEL) of West Palm Beach, Florida, a NELAC-certified environmental laboratory, will provide laboratory analytical services. J&R Environmental Drilling, licensed water well contractors, will provide drilling services. In accordance with the Client's instructions Langan secured bids from three soil excavation and disposal contractors. The contractor bids are comparable in scope; the low bid (\$28,535) was provided by WRS Environmental & Infrastructure. Attachment B contains the contractor bids.

Source Removal and Groundwater Assessment

Before field work begins, Langan will visit the site to mark the source removal locations – MW-28, MW-29, and SB-54I – and the locations for new monitoring wells west of MW-48 and MW-51R on airport property, call in a public utility clearance request to Sunshine One-Call, and discuss field logistics with facility management. Langan requires the Client to provide access to the drilling locations. Attachment C shows the proposed well locations and the source removal areas.

(In the case of SB-54I, Langan assumes that we will not be able to remove a portion of the west wall and of the floor of the equipment maintenance building to the west of the sample location. Langan will mark a sample location as close as possible to the building wall.)

Day 1 – The contractor will remove 20 square feet of concrete around MW-28 and around MW-29 and 20 square feet of asphalt around SB-54I. At each location Langan will collect four samples in a five-foot radius and four samples in a 10-foot radius using decontaminated stainless steel sampling equipment. We will submit the five-foot-radius samples for laboratory analysis of total arsenic (by EPA Method 6010) on a 24-hr turnaround time and ask the laboratory to archive the 10-foot-radius samples. The contractor will excavate at each location to the five-foot-sample points to four feet below grade and stockpile the excavated soil on plastic sheeting and cover the stockpiles with plastic sheeting. Langan will collect three composite samples for laboratory analysis of TCLP arsenic on a standard turnaround of five business days.

Day 2 – Under Langan's supervision, J&R will install two shallow 2-inch-diameter monitoring wells, which will consist of 10 feet of 0.01-inch slotted polyvinyl chloride (PVC) screen and approximately five feet of solid PVC riser. Langan will develop each well to remove fine material from the well screens and sand pack.

Day 3 – Assuming that the five-foot samples delineate arsenic to below 12 milligrams per kilogram (mg/kg) (the Direct Exposure-Commercial/Industrial Soil Cleanup Target Level [SCTL,

Chapter 62-777, Florida Administrative Code]), the contractor will backfill and compact the excavation and load out the excavated soil. We assume that we will dispose of 170 tons of soil.

Day 4 – Langan will sample the two new monitoring wells for laboratory analysis of total arsenic. We will purge each well with a low-flow peristaltic pump before sampling, and record water quality parameters (temperature, pH, dissolved oxygen, conductivity, and turbidity) until values stabilize within FDEP-acceptable ranges.

Langan will store development and purge water temporarily in 55-gal drums pending laboratory analysis. We recommend staging the drums in the maintenance area. This proposal includes the cost of disposing of two 55-gal drums of arsenic-contaminated ground water. This proposal assumes that the ground water is non-hazardous. Langan will manage and coordinate the disposal of all investigation derived wastes.

Day 5 – The contractor will replace the concrete and asphalt and restore the site. Langan will supervise the resurfacing and site restoration.

Alternative SCTL Calculation

Langan will apply the procedure discussed in Chapter 62-780.680(2)(b)(1)(c), FAC and, using the equations in Chapter 62-777, FAC, to calculate an alternative SCTL for the golf course. The calculation will include default parameters, which are provided in Chapter 62-777, FAC, and chemical-specific parameters, for which Langan will research the readily available literature.

This scope of work does not include field work to collect information on the site-specific properties of the soil in the golf course.

Remedial Action Implementation Report

Langan will prepare a Remedial Action Implementation Report (RAIR), which will include a discussion of the source removal (according to Chapter 62-780.500(7), FAC), an evaluation of a site-specific soil cleanup target level for the golf course, and a discussion of the groundwater investigation. The report will include figures showing sample locations and laboratory results, laboratory analytical summary tables, laboratory reports, groundwater sampling logs, soil boring logs, and disposal manifests.

COST AND SCHEDULE

Langan proposes to complete this scope of work for a not-to-exceed fee of \$56,300, which includes \$38,300 in subcontracted laboratory, drilling, excavation, and disposal costs:

Activity	Estimated Cost
<i>Source Removal</i>	
Langan Fee	\$6,500
Excavation/Disposal (subcontracted)	\$34,200
Laboratory (subcontracted)	\$1,300

Activity	Estimated Cost
<u>Groundwater Assessment</u>	
Langan Fee	\$3,400
Drilling (subcontracted)	\$2,400
Laboratory (subcontracted)	\$100
Drum disposal (subcontracted)	\$300
Alternate SCTL Evaluation	\$1,600
RAIR Preparation	\$6,500
Total:	\$56,300

This estimate assumes that the lowest contractor bid (from WRScompass) is acceptable to the Client.

We estimate that we can complete the field work within one month of authorization and the RAIR within one month of completing the field work. The RAIR is due to the Division by May 23, 2011.

This fee includes one meeting with the Division to discuss the RAIR, but does not include revising the document based on the Division's comments. If additional work is necessary to complete the RAIR (e.g., additional excavation or laboratory analysis), or if the Client requests that Langan provide out-of-scope services, Langan will discuss the additional effort with the Client and will invoice on a time-and-materials basis according to the attached Schedule of Fees and General Terms and Conditions.


CLOSING

Thank you for the opportunity to submit this proposal. We look forward to working with you. Please contact us if you have questions or concerns. If this proposal is acceptable, please sign below and return a copy for our files.

Sincerely,

Langan Engineering & Environmental Services


Daniel Spector, P.G.
Project Manager


Vincent D. Yarnia, P.G.
Associate

DS:vdy

Enclosures: Attachment A – Regulatory Correspondence
Attachment B – Subcontractor Bids
Attachment C – Proposed Well Locations and Source Removal Areas
Schedule of Fees and General Terms and Conditions

AUTHORIZATION

Receipt of this proposal, including the Schedule of Fees and General Terms and Conditions annexed hereto, is hereby acknowledged and all of the terms and conditions contained therein are accepted.

Company: _____ (“Client”)

By/Title: _____

Signature: _____

Date: _____

Attachment A
Regulatory Correspondence



Environmental Protection and Growth Management Department
POLLUTION PREVENTION, REMEDIATION AND AIR QUALITY DIVISION
One North University Drive, Suite 203, Plantation, Florida 33324
954-519-1260 • Fax 954-765-4804

February 22, 2011

Alessandra Delfico, P.E.
City of Pompano Beach
Engineering Department
1201 Northeast 5 Avenue
Pompano Beach, Florida 33060

**Re: Soil Investigation Report, Pompano Municipal Golf Course Maintenance Facility
1401 North Federal Highway, Pompano Beach, Florida 33060; Incident Date: May 16, 2002
EAR License No. 0639**

Dear Ms. Delfico:

The Broward County Pollution Prevention, Remediation and Air Quality Division (Division) has reviewed the document titled 'Soil Investigation Report/NFAC Plan' (Report) for the referenced site, dated January 14, 2011 (received January 18, 2011), and submitted by your consultant, Langan Engineering and Environmental Services, Inc. (Langan). The Report contains the results of the soil sampling activities conducted during September 2010. The Report contains a recommendation to conduct additional soil assessment and source removal activities and includes a No Further Action with Conditions (NFAC) Proposal.

The Division acknowledges the activities presented in the Report. However, please note the following comments and requirements:

- Langan recommends delineation of impacted soils followed source removal activities in order to meet the calculated 95% Upper Confidence Limit (UCL) of the Direct Exposure Commercial/Industrial based Soil Cleanup Target Levels (SCTLs) in the maintenance area. The Division does not object to Langan's recommendation. Please conduct recommended actions and provide calculations to demonstrate that the soils within the maintenance area meet the direct exposure commercial/industrial SCTLs upon completion of the recommended actions.
- Langan presents results of the 95% UCL calculation for the golf course area (tees, greens, rough areas) and indicates that the soils do not exceed the direct exposure commercial/industrial based SCTLs for these area. Please note that commercial/industrial-based SCTLs are not compatible with the proposed continued exposure scenario of golf course usage. The Division recommends that an Alternative SCTL be calculated for arsenic that utilizes specific exposure assumptions of golf course use. Such exposure assumptions may ultimately be described in a Declaration of Restrictive Covenant.
- Based on the results of recently conducted groundwater sampling activities, Langan indicates that the groundwater impacts identified at monitoring well locations MW-48 and MW-51R are not delineated and may extend westward into the part of the property that is currently being used as the Pompano

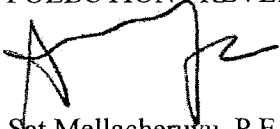
Beach Municipal Airport. Based on the available information, additional groundwater assessment activities are warranted to delineate the impacts identified at MW-48 and MW-51R locations.

- The Division encourages you and/or your assigns to contact the undersigned to discuss results of additional assessment activities, required herein.
- While the Division does not object to NFAC as an ultimate cleanup goal for this site, the Division cannot approve the NFAC Proposal at this time. Upon completion of the additional assessment and soil removal activities required herein, justification may be provided that the site meets the requirements of NFAC pursuant Rule 62-780.680, Florida Administrative Code (F.A.C.).
- One original of a Remedial Action Implementation Report must be submitted to this office no later than **Monday, May 23, 2011**. This document should contain disposal manifests, soil confirmation data, additional groundwater assessment data, and any necessary Alternative SCTL calculations. If applicable, the document may also contain a certified NFAC Proposal and act as a Site Rehabilitation Completion Report.

If you have questions regarding this review or require additional information, please contact me at (954) 519-1448 or smellacheruvu@broward.org.

Sincerely,

POLLUTION PREVENTION, REMEDIATION AND AIR QUALITY DIVISION



Sat Mellacheruvu, P.E.
Engineer II

cc: Daniel Spector, P.G./Vincent Yarina, P.G., Langan Engineering and Environmental Services, Inc.

**Attachment B
Subcontractor Bids**

WRSScompass



Miami Office
10050 NW 116th Way, Suite 18
Miami, Florida 33178
Phone 305-888-4090
Fax 305-888-0140

VIA ELECTRONIC MAIL: March 11, 2011

Mr. Daniel Spector, P.G.
Langan Engineering & Environmental Services
Parkside Corporate Center
15150 NW 79th Court, Suite 200
Miami Lakes, FL 33016

**Subject: Soil Excavation and Disposal Proposal
 Pompano Beach Municipal Golf Course
 Pompano Beach, Florida**

Dear Mr. Spector:

Pursuant to your request, WRS Infrastructure & Environment Inc. d/b/a WRScompass (WRS) is pleased to submit this proposal to perform services for concrete removal, soil excavation, disposal, and site restoration at the above-referenced site.

INTRODUCTION

It is our understanding that the above-referenced property contained arsenic above current regulatory levels in the soils. Langan Engineering and Environmental Services (Langan) completed soil and groundwater assessment at this Property and identified three areas of elevated levels of arsenic that require excavation in order for the Property to qualify for no Further Action with Conditions (NFAC). The three areas that need to be excavated are located at MW-28, MW-29, and SB-541. Langan is requesting that WRS perform concrete removal, soil excavation and disposal, and site restoration activities. The three areas are approximately 20 ft by 20 ft by 4 ft deep. We are assuming the removal and disposal of 800 square feet of concrete (assuming 6-inches thick) and 400 square feet of asphalt, backfilling and compacting the excavations, and replacing the concrete (reinforced 3,000 psi) and asphalt. Soil disposal is approximately 170 tons of soil. It is anticipated that some of the excavated soil would be returned to the excavations.

PROPOSED SCOPE OF WORK

The proposed scope of work to perform the project consists of the following:

Task I. Saw-Cut the three Areas and Excavate Soils:

- Mobilization of personnel and a backhoe to the site.
- Saw-cut two concrete and one asphalt covered area up to 20 x 20 x 0.5 ft deep
- Excavate up to and dispose up to 170 tons of soil

Task II. Backfill, Compaction, Soil Load-out:

- Load up to 170 tons of impacted soils into 18 cubic yard dump trucks for transport to a Class I Landfill
- Manifest the loads of soil transported from the site.
- Load and transport up to 18 cubic yards of concrete for disposal
- Load and transport up to 8 cubic yards of asphalt for recycling
- Backfill the excavations with up to 170 tons of clean fill
- Compaction of the excavations with walk-behind plate compactor

Task III. Excavation Re-surfacing:

- Replace up to 800 square feet of 6-inch thick 3,000-psi reinforce concrete with #5 rebar
- Replace up to 400 square feet of 1-inch thick asphalt cover

LUMP SUM FEE

The Lump Sum fee for the above tasks is **\$28,535.00**. Payment of the invoice is due upon receipt. Our fee assumes that the site is accessible to heavy equipment. Compensation for these and any additional services you request, above the project scope, will be based upon the actual time spent in accordance with rates in the attached cost estimate. Should delays arise or if the proposed scope of services herein is not sufficient to load and dispose the anticipated quantity of soils (170 tons), you would be contacted and we would request a change order to compensate for additional time and expenses.

UNIT RATES

Should additional excavation activities be required to complete the work, the following unit rates shall apply:

Project Manager.....	\$85/hour
Staff Scientist.....	\$75/hour
Equipment Operator.....	\$50/hour
Technician/Laborer.....	\$45/hour
Word Processor.....	\$40/hour
Pick-up Truck.....	\$75/day
Backhoe/combination Unit.....	\$300/day
Backhoe Mobilization.....	\$120/each way
Walk-behind Plate Compactor.....	\$150/day
Walk-behind Saw Cut.....	\$95/day
Concrete Re-surfacing (6-inch w/#5 rebar, 3000 psi).....	\$8.75/sf
Asphalt re-surfacing (1-inch).....	\$4.4/sf
Fill Material (LBR 40).....	\$12.20/ton
Soil Transportation Disposal.....	\$61.20/ton
Concrete Disposal.....	\$120/load
Asphalt Disposal.....	\$160/load

SCHEDULE

Project activities will be scheduled at a time mutually acceptable upon receipt of a signed proposal. The field work can commence within one week of receiving your authorization to proceed. The saw-cut and soil excavations can be complete in one day. The backfill, compaction, and load-out activities can be completed in one day. The excavation re-surfacing with concrete and asphalt can be completed in one day. Final non-hazardous waste disposal manifests should be received from the landfill within four weeks of disposing of the soils.

TERMS AND CONDITIONS

WRS is prepared to provide the specified services pursuant to the terms and conditions of the previously accepted contract on March 19, 2009. To initiate the work, please sign and send back this proposal. The following conditions apply:

1. The site is accessible to heavy equipment.
2. Any permits or regulatory approvals required to perform the work by Langan.
3. Sampling, analysis, and agency reporting by Langan.
4. No hazardous waste is encountered.
5. The work can be performed in level-D protection or less.
6. The work can be performed in no more than five days.
7. Underground utility clearance by Langan.
8. Sampling and profiling for disposal acceptance by Langan.
9. Proctor and density testing by Langan.

We appreciate the opportunity to provide this work plan and cost estimate. Should have any questions or comments, or require additional information, please do not hesitate to contact me at (305) 888-4090.

Sincerely,

WRS Infrastructure & Environment Inc.



Yudex A. Hasbun, P.E.

Contract Manager

ACCEPTANCE:

Accepted
Daniel Spector, P.G.

Date

Kandra's Construction

Petroleum Cleanup Preapproval Program

Source Removal Quote / Summary Form

FDEP Preapproval Contractor: Kandras Construction
 Facility Name: POMPANO GOLF COURSE
 Facility ID#: _____
 Tank Removal / Upgrade: NO
 Total Volume To Be Excavated: 178 (cubic yards)

Key: l.s. = Lump Sum
 s.f. = Square Foot
 c.y. = Cubic Yard
 l.f. = Linear Foot

DESCRIPTION (all categories include labor, fuel, mob/demob, per diem, equipment & expendables)	UNIT COSTS							
	QTY.	UNIT	IN-HOUSE UNIT COST	SUB UNIT COST	IN-HOUSE SUBTOTAL	SUB SUBTOTAL	SUB ID #	TOTAL
Permitting Cost								
1 Permit (specify type) Construction permit, Tree removal/replace, shed removal/install (This item is for actual permit costs only. Costs associated with pulling permits (labor, etc.) should not be included in the unit rate for this item and should be included in item #2)	1	each	\$1,800.00		\$1,800.00	\$0.00		\$1,800.00
2 Other Permit Costs (This item is for costs associated with pulling permits (labor, etc.))	0	each	\$250.00		\$0.00	\$0.00		\$0.00
Sub-Total Permitting Cost					\$1,800.00	\$0.00		\$1,800.00
Activities								
3 Asphalt and/or Concrete Removal (Asph pave-400 ft ² , concrete slab- 800 ft ²)	1200	s.f.	\$2.00		\$2,400.00	\$0.00		\$2,400.00
4 Asphalt and/or Concrete Transportation & Disposal (1.4 factor)	40	ton	\$37.50		\$1,500.00	\$0.00		\$1,500.00
5 Conventional Soil Excavation (total depth ≤ 20 feet) (conversion factor for tonnage: 1.4) (includes loading of excavated soils and install/compact backfill material)	178	c.y.	\$32.01		\$5,697.78	\$0.00		\$5,697.78
6 Conventional Soil Excavation (total depth > 20 feet) (conversion factor for tonnage: 1.4) (includes loading of excavated soils and install/compact backfill material)		c.y.			\$0.00	\$0.00		\$0.00
7 Sheet Piling (specify wall depth: _____ feet)		per l.f.			\$0.00	\$0.00		\$0.00
8 Large Diameter Auger Excavation Without Casing (auger dia. _____ feet) (includes loading)		c.y.			\$0.00	\$0.00		\$0.00
9 Large Diameter Auger Excavation With Casing (auger dia. _____ feet) (includes loading)		c.y.			\$0.00	\$0.00		\$0.00
10 Flowable Fill Concrete (psi: _____)		c.y.			\$0.00	\$0.00		\$0.00
(psi: _____)		c.y.			\$0.00	\$0.00		\$0.00
11 Stormwater / Erosion Control (specify type) Silt Fence (approx. 300 ft)	0	l.s.	\$800.00		\$0.00	\$0.00		\$0.00
12 Compaction Testing - 98% density, 1ft lift (approx. 10 test with Proctor)	1	l.s.	\$800.00		\$800.00	\$0.00		\$800.00
13 Backfill Material (includes transport) (specify type of clean fill): QUARRY SAND	177	TON	\$13.84		\$2,449.68	\$0.00		\$2,449.68
14 Transport - Impacted Soil	177	ton	\$8.00		\$1,416.00	\$0.00		\$1,416.00
15 Disposal - Impacted Soil (landfill)	177	ton	\$46.00		\$8,142.00	\$0.00		\$8,142.00
16 Disposal - Impacted Soil (thermal treatment)		ton			\$0.00	\$0.00		\$0.00
17 Disposal - Impacted Soil (other) (specify type): _____		ton			\$0.00	\$0.00		\$0.00
18 Transport - Clean Overburden		ton			\$0.00	\$0.00		\$0.00
19 Disposal - Clean Overburden (specify disposal method): _____		ton			\$0.00	\$0.00		\$0.00
20 Petroleum Storage System Removal and Disposal (includes vapor evacuating, sludge removal, cleaning, etc.)								
Tank Volume 1 (gal): _____ # of Tanks: _____ AST or UST: _____		tank			\$0.00	\$0.00		\$0.00
Tank Volume 2 (gal): _____ # of Tanks: _____ AST or UST: _____		tank			\$0.00	\$0.00		\$0.00
Tank Volume 3 (gal): _____ # of Tanks: _____ AST or UST: _____		tank			\$0.00	\$0.00		\$0.00
Tank Volume 4 (gal): _____ # of Tanks: _____ AST or UST: _____		tank			\$0.00	\$0.00		\$0.00
21 Petroleum Contact Water T&D		gallons			\$0.00	\$0.00		\$0.00

Petroleum Cleanup Preapproval Program

Source Removal Quote / Summary Form

FDEP Preapproval Contractor: Kandras Construction
 Facility Name: POMPANO GOLF COURSE
 Facility ID#: _____
 Tank Removal / Upgrade: NO
 Total Volume To Be Excavated: 178 (cubic yards)

Key: l.s. = Lump Sum
 s.f. = Square Foot
 c.y. = Cubic Yard
 l.f. = Linear Foot

QTY.	UNIT	IN-HOUSE UNIT COST	SUB UNIT COST	IN-HOUSE SUBTOTAL	SUB SUBTOTAL	SUB ID #	UNIT COSTS	
							TOTAL	TOTAL
				\$0.00	\$0.00			\$0.00
22	Product Transport & Disposal			\$0.00	\$0.00			\$0.00
23	Petroleum Storage System Installation			\$0.00	\$0.00			\$0.00
	Tank Volume 1 (gal): _____ # of Tanks: _____ AST or UST: _____			\$0.00	\$0.00			\$0.00
	Tank Volume 2 (gal): _____ # of Tanks: _____ AST or UST: _____			\$0.00	\$0.00			\$0.00
	Tank Volume 3 (gal): _____ # of Tanks: _____ AST or UST: _____			\$0.00	\$0.00			\$0.00
	Number of Dispensers: _____			\$0.00	\$0.00			\$0.00
24	Site Paving - Asphalt (includes sub-base) (thickness: 6-8 inches)	400	s.f.	\$7.50	\$3,000.00			\$3,000.00
25	Site Paving - Concrete (Restore the concrete pad under the shed)	800	s.f.	\$5.25	\$4,200.00			\$4,200.00
	(psi: _____, thickness: 6 inches)				\$0.00			\$0.00
	(psi: _____, thickness: _____ inches)				\$0.00			\$0.00
	(psi: _____, thickness: _____ inches)				\$0.00			\$0.00
26	Sod (1777 s.f.)	0	s.f.	\$0.70	\$0.00			\$0.00
27	Seed & Mulch (includes tacking)				\$0.00			\$0.00
28	Safety Devices (barricades, lights, signs, concrete barriers, trench boxes & plates)	20	l.s.	\$40.00	\$800.00			\$800.00
29	Security Fencing	0	l.f.	\$9.50	\$0.00			\$0.00
30	Dewatering System (specify # of points: _____) (system type) _____ (extended rate: _____ daily / weekly)				\$0.00			\$0.00
31	Onsite Treatment System (specify maximum influent capacity _____ gal/min) (extended rate: _____ daily / weekly) (includes setup, operation, monitoring and removal of system)				\$0.00			\$0.00
32	Holding Tank (specify tank size _____ gallons) (extended rate: _____ daily / weekly)				\$0.00			\$0.00
33	FICUS tree removal (approx. dia - 14ft, approx. ht -30-50 ft)	0	l.s.	\$3,200.00	\$0.00			\$0.00
34	BOTTLEBRUSH tree removal (approx dia - 8 inch, approx. ht - 10 ft)	0	l.s.	\$250.00	\$0.00			\$0.00
35	11 by 11 Shed replacement	0	l.s.	\$2,945.00	\$0.00			\$0.00
36	Gravel (14 ft by 42 ft) - east of property (approx 588 sq. ft)	0	l.s.	\$450.00	\$0.00			\$0.00
	Sub-Total Activities Cost				\$30,405.46			\$30,405.46
	PROJECT TOTAL				\$32,205.46			\$32,205.46

* Costs included in this activity shall account for labor only. No costs shall be included for hardware (tanks, product lines, dispensers, etc.).

Engineered Environmental Solutions

PROPOSAL

Engineered Environmental Solutions, Inc.
 601 N East Coast Avenue
 Lantana, FL 33462
 561-721-0062 Office
 561-721-0127 Fax
 erockett@engineeredenvironmental.com

17-Mar-11

Proposal No.:

TO:
 Mr. Danny Spector, PG
 Project Manager
 Langan Engineering
 7900 Miami Lakes West, Suite 102
 Miami Lakes, FL 33016
 Phone: 305-362-1155
 Fax: 305-362-5212
 E-mail dspector@langan.com

JOB DESCRIPTION/LOCATION
 Pompano Beach Golf Course
 Pompano Beach, FL

 Excavation

ITEM	DESCRIPTION	RATE	UNITS	QTY	AMOUNT
	Excavation, loading out and backfilling of three areas, each 20' x 20' by 4' deep				
1	Scope of Services Mobilization - Underground utility locate with Florida One Call - Permit with City of Pompano Beach - Mobilization of equipment and crew - 30 Flashing Barricades	\$3,190.00	Total	1	\$3,190.00
2	Removal and Disposal of 800 SF of concrete (assume 6" max) and 400 SF asphalt	\$2,555.00	Total	1	\$2,555.00
3	Excavation and stockpiling services	\$3,000.00	Day	1	\$3,000.00
4	Loading Services	\$3,000.00	Day	1	\$3,000.00
5	Backfilling Services - Includes Compaction to 6" BLS	\$3,000.00	Day	1	\$3,000.00
6	Additional Mobilization of Equipment and Personnel (if required)	\$600.00	Total		\$0.00
7	Transportation of Impacted Soil to Waste Management Landfill Pompano	\$105.60	Load	8	\$844.80
8	Disposal of Arsenic Impacted Soil at Waste Management Landfill Pompano	\$58.00	Ton	168	\$9,744.00
9	Backfill- Cyclone Sand	\$10.00	Ton	168	\$1,680.00
10	Resurface two areas each 20'x20' with 6" welded wire fabric reinforced 3000 psi concrete.	\$5,975.00	Total	1	\$5,975.00
11	Resurface 20' x 20' area with 6" compacted crushed limerock and 1.5" asphalt	\$4.50	SF	400	\$1,800.00
TOTAL					\$34,788.80

ASSUMPTIONS and NOTES:

1. EESI not responsible for damage to underground utilities not located by CALL SUNSHINE, owner, or client prior to excavation work.
2. Analyticals required for the Transportation and Disposal of contaminated material not included in this proposal.
3. All consulting services (i.e. field varification sampling, drilling, reporting, etc.) by Langan.

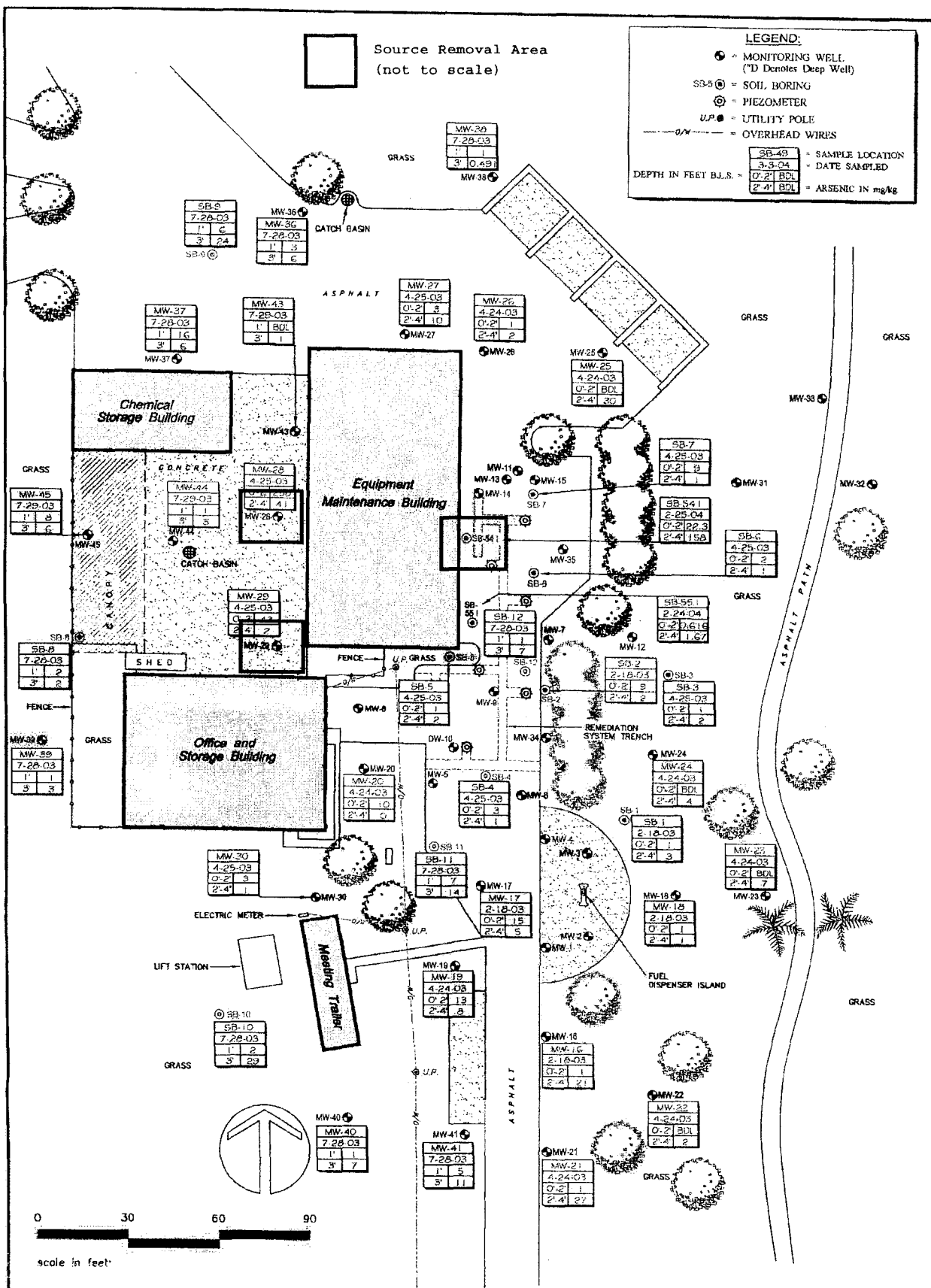


Erika Rockett, BC, PSSC

Acceptance:

Signature, Title, Date

Attachment C
Proposed Well Locations and
Source Removal Areas



HANDEX **HANDEX OF FLORIDA**
 2055 S. CONGRESS AVE.
 DELRAY BEACH, FL. 33445
 Phone: 561.243.9551
 Fax: 561.243.8707

DRAWN BY: *Hector A. Garbarro*
 REVISED BY:
 APPROVED BY: *Randy Whitwell, P.E.*
 DATE: MARCH 29, 2004
 SCALE: 1" = 30'

CITY OF POMPAÑO BEACH
 Municipal Golf Course
 Northeast 14th Street and U.S. 1
 Pompano Beach, Florida

DISTRIBUTION OF ARSENIC IN SOILS
 February 18, April 24-25,
 July 28-29, 2003 and March 3, 2004

FIGURE
3 a

SCHEDULE OF FEES AND CONDITIONS

Effective 1 January 2008

BILLING CATEGORY	HOURLY BILLING RATE
Principal	\$250
Senior Project Personnel	\$220
Project Personnel Level III	\$200
Project Personnel Level II	\$190
Project Personnel Level I	\$175
Assistant Project Personnel – Level III	\$160
Assistant Project Personnel – Level II	\$153
Assistant Project Personnel – Level I	\$145
Senior Personnel/Scientist/Designer – Level III	\$122
Senior Personnel/Scientist/Designer – Level II	\$117
Senior Personnel/Scientist/Designer – Level I	\$112
Staff Personnel, Designers, Senior Technicians – Level III	\$ 98
Staff Personnel, Designers, Senior Technicians – Level II	\$ 93
Staff Personnel, Designers, Senior Technicians – Level I	\$ 88
Assistant Staff Personnel	\$ 85
Draftspeople, Engineering Technicians, Inspectors	\$ 77
Technicians, Word Processors/Technical Typists, Financial Analysts	\$ 70

- Senior Principals are billed at \$350/hour.
- At any level, personnel may be engineers, geologists, hydrogeologists, landscape architects, regulatory specialists, scientists, toxicologists, wetland specialists, etc.
- Litigation related services, including expert testimony, court appearance, depositions, etc., are billed at \$350/hour for Principals and Senior Project Personnel, and \$250/hour for all other Project Level Personnel.
- This Schedule of Fees has been developed in accordance with "charges for Consulting Engineering Services", specified by the ASCE in its standard manual No. 45, 2002 revised edition. Langan reserves the right to make adjustments for individuals within these classifications as may be necessary by reason of promotion, and to increase our hourly billing rates due to annual salary increases.

COMPUTER SERVICES

The fee services on our in-house computers is billed on a time bases at the following rates:

	Rate Per Hour
CADD, GIS and Terrain Modeling Programs	\$ 30
Engineering Programs/Digitizing	25
Plotting (minimum charge; 3 minutes)	50
PC Entry	10

REIMBURSABLE EXPENSES

PROFESSIONAL LIABILITY AND RELATED INSURANCE

A surcharge of 4% will be added to the invoice total to cover the cost of Professional Liability insurance and related costs of insurance.

IN-HOUSE GEOTECHNICAL LABORATORY TESTS

Laboratory testing will be billed at unit rates depending on the type of test. A schedule of unit prices for standard laboratory tests will be furnished upon request. Engineering soil and/or rock samples will be stored for 90 days without charge and will be discarded, or returned the client, unless otherwise requested by the client. Sample storage past 90 days will be billed at \$105.00 per box per month.

HEALTH AND SAFETY AND OTHER SPECIAL FIELD EQUIPMENT

Special equipment such as nuclear densometers, seismographs, load test equipment, surveying equipment, disposable protective equipment, respirator cartridges, OVA's and similar safety and/or monitoring equipment will be billed on daily, weekly or monthly rates. A rate schedule will be provided upon request.

SUBCONTRACTED CHARGES

All subcontracted work including laboratory analyses, borings, test pits, report reproduction, outside computer services, surveying, etc., will be billed at cost plus 15%.

OTHER EXPENSES

All expenses incurred for special supplies, plan reproduction, long distance communications, travel and subsistence and other project related expenses will be billed at cost plus 10%. Car mileage is billed at \$.51/per mile. Sampling vans are billed at daily rates plus mileage.

TERMS

Invoices are payable within 30 days. A service charge of 1.0% per month will be imposed on all bills not paid within 30 days. If a bill remains unpaid after 60 days, we will discontinue our work until payments are received to bring your account current. We reserve the right to terminate an account without notice for non-payment.

GENERAL TERMS AND CONDITIONS

A. SCOPE OF SERVICES AND ADDITIONAL SERVICES

All services provided by **Langan Engineering and Environmental Services, Inc. or, in New York State, Langan Engineering and Environmental Services, Inc., P.C. or Langan International ("LANGAN")**, regardless of commencement date, will be covered by this Agreement. Unless modified in writing by the parties, the duties of LANGAN shall not be construed to exceed those Services specifically set forth in the proposal. However, if requested by the CLIENT and agreed to by LANGAN, LANGAN will perform additional services ("Additional Services"), and such Additional Services shall be governed by these provisions. Unless otherwise agreed to in writing, the CLIENT shall pay LANGAN for the performance of any Additional Services an amount based upon LANGAN's then-current hourly rates.

B. STANDARD OF CARE

LANGAN's services will be performed, prepared, and presented in accordance with this Agreement and in a manner consistent with generally accepted professional engineering, surveying, geotechnical, environmental and geological standards ordinarily exercised by other professionals performing similar services under similar circumstances at the place and time the services are being performed. LANGAN shall exercise reasonable professional care in its efforts to comply with codes, regulations, laws, rules, ordinances, and such other requirements in effect as of the date of execution of this Agreement. The Client agrees that no other representation, warranty or guarantee, expressed or implied, is provided by LANGAN or is presumed given by LANGAN under this Agreement or in any report, opinion, or any other document prepared by LANGAN or otherwise.

C. CLIENT RESPONSIBILITIES

In addition to other responsibilities described herein, the CLIENT shall: (i) provide all information and criteria as to the CLIENT's requirements, objectives, and expectations for the project, including all numerical criteria that are to be met and all standards of development, design, or construction; (ii) provide to LANGAN all previous studies, plans, or other documents pertaining to the project and all new data reasonably necessary in LANGAN's opinion, such as site survey and engineering data, environmental impact assessments or statements, zoning or other land-use regulations, upon all of which LANGAN may rely; (iii) review all documents or oral reports presented by LANGAN and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of LANGAN; (iv) furnish approvals and permits from governmental authorities having jurisdiction over the project and approvals and consents from other parties as may be necessary for completion of LANGAN's services; (v) give prompt written notice to LANGAN whenever the CLIENT becomes aware of any development that affects the scope and timing of LANGAN's services or any defect or noncompliance in any aspect of the project; and (vi) bear all costs incident to the responsibilities of CLIENT. LANGAN shall have the right to rely on the accuracy and completeness of all information furnished to it by the Client.

D. INVOICING, SERVICE CHARGES AND NO RIGHT OF SETOFF

LANGAN will submit monthly invoices to CLIENT and a final bill upon completion of Services. CLIENT shall notify LANGAN within two weeks of receipt of invoice of any dispute with the invoice. CLIENT and LANGAN will promptly resolve any disputed items. Payment on undisputed invoice amounts is due upon receipt of invoice by CLIENT and is past-due thirty (30) days from the date of the invoice. A service charge of 1% per month will be imposed on all bills not paid within 30 days. In the event of a suspension of services or termination of the Agreement by LANGAN in accordance with Section P of these General Terms and Conditions, LANGAN shall have no liability for any delay or damage of any kind actually or allegedly caused by such suspension of services or termination. The Client shall have no right of setoff against the amounts due to LANGAN and no deductions shall be made from LANGAN's compensation on account of any actual or alleged claim, action, breach, error, omission, tort, fault, wrong, liability, penalty or damage actually or allegedly caused by, arising from or relating to LANGAN, LANGAN's services on the Project, or this Agreement.

If LANGAN files a claim against the Client arising out of the Client's failure to make payments in accordance with this Agreement and Client subsequently asserts any claim or claims against LANGAN relating to allegations of professional negligence in performance of LANGAN'S services under this Agreement, LANGAN shall be entitled to reimbursement of any costs incurred by LANGAN in the defense of the professional negligence claim(s), including any expenses incurred as part of LANGAN'S professional liability insurance deductible, to the extent LANGAN is successful in its compensation claim or negligence defense.

E. RIGHT OF ENTRY

The Client will provide for right of entry in order for LANGAN to perform its services. While LANGAN will take all reasonable precautions to minimize any

damage to the property, it is understood by the Client that in the normal course of work some damage may occur, the correction of which is not part of this Agreement.

F. JOBSITE SAFETY AND CONTROL OF WORK

LANGAN shall take reasonable precautions to safeguard its own employees. Except as otherwise expressly agreed to in writing by LANGAN, LANGAN shall have no responsibility for the safety program at the Project nor the safety of any contractor, subcontractor or other person. Neither the professional activities of LANGAN nor the presence of LANGAN's employees and subcontractors at the Project site shall be construed to confer upon LANGAN any responsibility for any activities on site performed by personnel other than LANGAN's employees. The Client agrees that LANGAN shall have no power, authority, right or obligation to supervise, direct, stop the work of or control the activities of any contractors or subcontractors or construction manager, their agents, servants or employees.

G. EXISTING CONDITIONS AND SUBSURFACE RISKS

Special risks occur whenever engineering or related disciplines are applied to identify subsurface conditions. Even a comprehensive sampling and testing program implemented in accordance with a professional Standard of Care may fail to detect certain conditions. The environmental, geologic, geotechnical, geochemical, and hydrogeologic conditions that LANGAN interprets to exist between sampling points may differ from those that actually exist. Client recognizes that actual conditions may vary from those encountered at the locations where borings, sampling, surveys, observations or explorations are made by LANGAN and that the data, interpretation, and recommendations of LANGAN are based solely on the information available to it. Furthermore, CLIENT recognizes that passage of time, natural occurrences, and/or direct or indirect human intervention at or near the site may substantially alter discovered conditions. LANGAN shall not be responsible for interpretations by others of the information it develops or provides to the Client.

LANGAN will take reasonable precautions to avoid damage or injury to subterranean structures or utilities in the performance of its services. CLIENT agrees to defend, indemnify, and hold LANGAN harmless for any damage to subterranean structures or utilities and for any impact this damage may cause where the subterranean structures and utilities are not called to LANGAN's attention or are not correctly shown on the plans furnished.

H. HAZARDOUS MATERIALS

Unless otherwise expressly agreed to in writing, the parties acknowledge that LANGAN'S scope of services does not include any services related to a Hazardous Environmental Condition (the presence of asbestos, PCBs, petroleum, mold, waste, radioactive materials or any other hazardous substances).

I. INDEMNIFICATION

Subject to the provisions of Section J of this Agreement, LANGAN agrees to indemnify and hold harmless Client and Client's parents, subsidiaries, affiliates, partners, officers, directors, shareholders, employees and agents for any and all claims, damage obligations, liabilities, suits, demands and losses for personal injury and/or property damage including reasonable attorney's fees and all other expenses and disbursements, asserted by any third parties to the extent arising out of the negligent acts or omissions of LANGAN in the performance of its services under this Agreement. LANGAN shall not be responsible for any loss, damage, or liability arising from any acts by the Client or any of its agents, employees, staff, or other consultants, subconsultants, contractors or subcontractors. In no event shall the indemnification obligation extend beyond the date when the institution of legal or equitable proceedings for professional negligence would be barred by an applicable statute of repose or statute of limitations.

To the fullest extent permitted by law, the Client agrees to defend, indemnify, and hold LANGAN and LANGAN's parents, subsidiaries, affiliates, partners, officers, directors, shareholders, employees and agents harmless for any and all claims, damage obligations, liabilities, suits, demands and loss, including reasonable attorneys' fees and all other costs, expenses and disbursements, to which LANGAN may be subject, actually or allegedly arising from or relating to (i) any unknown site condition or subterranean structures of which LANGAN does not have actual knowledge; (ii) any errors, omissions or inconsistencies in any data documents, records or information provided to LANGAN by Client; (iii) any breach, tort, error, omission, wrong, fault or failure to comply with law of the Client or third party over whom LANGAN has no control; (iv) the transport, treatment, removal or disposal of all Samples; and (v) Client's unauthorized use or copyright violation of plans, reports, documents and related materials prepared by LANGAN. In the event any part of this indemnification is void as a matter of law, then only that portion that is deemed void as a matter of law shall be stricken and the balance of this indemnification shall remain in full force and effect.

J. LIMITATION OF LIABILITY

The Client agrees to limit LANGAN's liability to the Client and to any and all of the Client's parents, subsidiaries, affiliates, partners, officers, directors, shareholders, employees, agents, construction managers, contractors, subcontractors, consultants, subconsultants and insurers for any and all damages arising out of or relating to the performance of LANGAN's services under this Agreement, such that LANGAN's aggregate liability to all those named will not exceed the lesser of (i) LANGAN's fee for its services on the Project or (ii) the proceeds recoverable from LANGAN's insurance. In the event that this limitation of liability provision is deemed void as a matter of law, then LANGAN's liability pursuant to this Section J shall be limited to the lowest amount allowable as a matter of law. Client agrees to notify any construction manager, contractor, subcontractor, or consultant who may perform work on behalf of Client in connection with any design, report or study prepared by LANGAN of such limitation of professional liability for defects, errors, omissions or negligence and to require as a condition precedent to their performing their work a like indemnity and limitation of liability on their part in favor of LANGAN.

To the fullest extent permitted by law, the Client further agrees that no shareholder, officer, director, partner, principal or employee of LANGAN shall have personal liability for any act, omission, breach, tort, fault or wrong arising from or relating to LANGAN's services on the Project or under this Agreement.

LANGAN and the Client waive consequential or special damages, including, but not limited to, loss of use, profits, revenue, business opportunity, or production, for claims, disputes, or other matters in question arising out of or relating to the services provided by LANGAN regardless of whether such claim or dispute is based upon an alleged breach of contract, willful misconduct or negligent act or omission of either of them or their employees, agents, subconsultants, or other legal theory. This mutual waiver is applicable without limitation to either party's termination of this Agreement pursuant to the terms set forth herein.

To the extent damages are covered by property insurance, LANGAN and the Client waive all rights against each other and against the contractors, consultants, agents and employees of the other for damages, except such rights as they may have to the proceeds of such insurance. LANGAN and the Client, as appropriate, shall require of the contractors, subcontractors, consultants, subconsultants, agents and employees of any of them similar waivers in favor of the other parties enumerated herein.

K. INSURANCE

LANGAN maintains workers' compensation, general liability, property, automobile and professional liability insurance. Certificates of insurance will be issued to the Client upon a written request from the Client. Client agrees that it will require the construction manager, general contractor or, if Client has not retained a construction manager or general contractor, the contractor(s) responsible for performing the work reflected by or relating to LANGAN's services on the Project, to name LANGAN as an additional insured on its Commercial General Liability and Automobile Liability Insurance. CLIENT shall not require LANGAN to sign any document or perform any Service that, in the judgment of LANGAN, would risk the availability or increase the cost of its professional or general liability insurance.

L. CLIENT REQUIRED TO SERVE A NOTICE OF CLAIM

The Client shall make no claim (directly or in the form of a third-party claim) against LANGAN, unless the Client has first provided LANGAN with a written certificate, executed by an independent engineer, surveyor or geologist, as may be applicable to the claim, or other appropriate professional licensed in the state in which the Project is located, specifying and certifying each and every act or omission that the Client contends constitutes a violation of the standard of care governing a geotechnical, civil or environmental engineer, surveyor or geologist or other professional, as the case may be, performing professional services under similar circumstances. Such certification shall be provided to LANGAN thirty (30) calendar days prior to the institution of any legal proceeding by Client.

M. FORCE MAJEURE

LANGAN shall not be responsible or liable for any delays in performance or failure of performance related to any force majeure event, including but not limited to fire, flood, explosion, the elements, or other catastrophe, acts of God, war, riot, civil disturbances, terrorist act, strike, lock-out, refusal of employees to work, labor disputes, inability to obtain materials or services, or delays caused by the Client, its agents, contractors, subcontractors, consultants, subconsultants or employees, or any governmental regulation or agency, or for any other reason beyond the control of LANGAN.

N. OPINION OF COST

Consistent with the Standard of Care in Section B of this Agreement, any opinions rendered by Langan as to costs, including, but not limited to, opinions as to the costs of construction, remediation and materials, shall be made on the

basis of its experience and represent its judgment as an experienced and qualified professional familiar with the industry. LANGAN cannot and does not guarantee that proposals, bids, or actual costs will not vary from its opinions of cost. LANGAN's services required to bring costs within any limitation established by the CLIENT will be paid for as Additional Services.

O. PROFESSIONAL WORK PRODUCT

All reports, opinions, notes, drawings, specifications, data, calculations, and other documents prepared by LANGAN ("Documents") and all electronic media prepared by LANGAN are considered its professional work product to which LANGAN retains all rights. CLIENT acknowledges that electronic media are susceptible to unauthorized modification, deterioration, and incompatibility; and therefore, CLIENT cannot rely upon the electronic media version of LANGAN's professional work product. All Documents provided by LANGAN to Client as part of the services are provided for the sole and exclusive use of the Client with respect to the Project and/or subject property. The Client agrees not to use the Documents for any other purpose, future additions or alterations to this Project or for other projects or property without LANGAN's express written consent. Any unauthorized use of the Documents will be at the Client's sole risk and without liability to LANGAN or its subconsultants. Accordingly, Client shall defend, indemnify, and hold harmless LANGAN from and against any and all losses, claims, demands, liabilities, suits, actions, and damages whatsoever arising out of or resulting from such unauthorized use.

P. TERMINATION

Except as otherwise provided in this Agreement, this Agreement may be terminated by either party upon not less than seven (7) calendar days' written notice should the other party fail substantially to perform in accordance with the terms and conditions of this Agreement through no fault of the party initiating the termination. If the defaulting party fails to cure its default within the seven (7) calendar day notice period or fails to commence action to cure its default if the cure cannot reasonably be completed within the seven (7) days, the non-defaulting party may terminate the Agreement. Failure of the Client to make payments to LANGAN in accordance with this Agreement shall be considered substantial non-performance and grounds for termination or suspension of services at LANGAN's option after such seven (7) day notice period or anytime thereafter. In the event of termination, LANGAN shall be compensated for all services performed and reimbursable expenses incurred prior to such termination and all termination expenses.

Q. DISPOSAL OF SAMPLES

All samples, contaminated or otherwise ("Samples"), collected by LANGAN while performing services under this agreement are the property and responsibility of the Client. LANGAN may dispose of Samples in its possession after ninety (90) calendar days unless otherwise required by law or other arrangements are mutually agreed to in writing by the parties. At all times, any and all rights, title and responsibility for Samples shall remain with the CLIENT and under no circumstances shall these rights, title and responsibility be transferred to LANGAN.

R. RIGHT TO REFERENCE PROJECT

Client agrees that LANGAN has the authority to use its name as a client and a general description of the Project as a reference for other prospective clients.

S. SUCCESSORS AND ASSIGNS

This Agreement shall be binding upon the parties hereto and their respective legal representative successors and assigns as provided herein. No party shall assign or transfer this Agreement without the prior written consent of the other party. The parties agree that this Agreement is not intended to give any benefits, rights, actions or remedies to any person or entity not a party to this Agreement, as a third-party beneficiary or otherwise under any theory of law.

T. DISPUTE RESOLUTION

LANGAN and Client agree that any disputes arising under this Agreement and the performance thereof shall be subject to non-binding mediation as a prerequisite to further legal proceedings.

U. GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of the state in which the office of LANGAN that issued the Proposal is located.

V. ENTIRE AGREEMENT

This Agreement (consisting of these General Terms and Conditions, LANGAN's Fee Schedule if applicable and any Proposal which these Conditions accompany and of which they are part) constitutes the entire agreement between the parties, supersedes any and all prior agreements or representations of the parties to this agreement, and may not be modified, amended, or varied except by a document in writing signed by the parties hereto.

"CITY":

Witnesses:

CITY OF POMPANO BEACH

By: _____
LAMAR FISHER, MAYOR

By: _____
DENNIS W. BEACH, CITY MANAGER

Attest:

(SEAL)

MARY L. CHAMBERS
CITY CLERK

Approved As To Form:

GORDON B. LINN
CITY ATTORNEY

STATE OF FLORIDA
COUNTY OF BROWARD

The foregoing instruments were acknowledged before me this _____ day of _____, 2011 by **LAMAR FISHER** as Mayor, **DENNIS W. BEACH** as City Manager and **MARY CHAMBERS**, City Clerk of the City of Pompano Beach, Florida, a municipal corporation, on behalf of the municipal corporation, who are personally known to me.

NOTARY'S SEAL:

NOTARY PUBLIC, STATE OF FLORIDA

(Name of Acknowledger Typed, Printed or Stamped)

Commission Number