

CITY OF PALMER ACTION MEMORANDUM NO. 09-012

SUBJECT: Authorize City Manager to Negotiate and Enter into a Professional Services Agreement with Hattenburg Dilley & Linnell in the Amount of \$26,736 to Perform Professional Engineering Soil Testing Services to the Mat-Su Borough Parcel No. 17N02E17D012 and 17N02E17D013 Adjacent to the Palmer Wastewater Treatment Plant

AGENDA OF: February 10, 2009

Council action:	Authorized
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Approved for presentation by B.B. Allen, City Manager *B.B. Allen*

Route To:	Department/Individual:	Initials:	Remarks:
X	Originator – Public Works	<i>AKL</i>	
X	City Clerk	<i>JB</i>	
X	City Attorney	<i>LB</i>	
	Director of Administration		
	Director of Community Development		
	Director of Community Services		
	Director of Public Safety		
	Director of Public Works		

Attachment(s): Property Legal Descriptions (Exhibit A); Map (Exhibit B) Proposal from Hattenburg, Dilley & Linnell; Summary of Economic Impact

Fiscal note:

	No fiscal impact.	
X	Funds are budgeted from this account number:	02-XXXX
	Funds are not budgeted. Budget modification is required. Affected account numbers:	

Finance Director Signature: *[Signature]*

Summary statement: The proposal from Hattenburg Dilley & Linnell is for geotechnical studies at the proposed subsurface discharge area adjacent to the wastewater treatment plant. Attached is Exhibit A which is the legal descriptions for the two properties owned by Kenneth Loyer. The City has been working with Kenneth Loyer the owner of the properties to execute a right-of-entry agreement, no work will be performed until the agreement is executed. The purpose of this work is to gather soil and groundwater data, including in-situ moisture content, grain size, soil profile, percolation rates, and presence of groundwater. The information

collected will determine if the site is suitable for subsurface wastewater discharge.

The funding for this will be determined after the results are evaluated. This work may be reimbursed at 100% from the Matanuska Susitna Borough Regional Wastewater Treatment Plant Study Grant or the ADEC Grant No. 67114 which will reimburse 70% of the costs.

Hattenburg Dilley & Linnell are the lead firm under the borough wide regional wastewater treatment plant study. This is also the quickest delivery methods available to get the testing done to meet critical funding sources deadlines.

Once the soil testing is completed, and if the soils meet the needed criteria, sound engineering for a new subsurface drainage system and other necessary plant improvements can be designed under two existing ADEC Grants No. 67114 and 67107. It is critical to have this work completed to be Construction ready no later than spring of 2010.

Administration recommendation: Approve Action Memorandum No. 09-012.



City of Palmer • Summary of Economic Impact

Proposed Legislative Action:

Authorize City Manager to Negotiate and Enter into a Professional Services Agreement with Hattenburg Dilley & Linnell in the Amount of \$26,736 to Perform Professional Engineering Soil Testing Services to the Mat-Su Borough Parcel No. 17N02E17D012 and 17N02E17D013 Adjacent to the Palmer Wastewater Treatment Plant

List all of the costs associated with enactment of the legislation:

List the corresponding funding source:

		Source:		Amount:
Implementation:	\$ 1,337	Public Works implementation cost	\$	1,337
Capital:	\$		\$	
Operation:	\$		\$	
Maintenance:	\$		\$	
Total:	\$ 1,337		Total: \$	1,337

Revenues (list the affected line item name and number):

Operating funds:	FY09	FY10	FY11	FY12
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
Total:	\$	\$	\$	\$

Enterprise funds:	FY09	FY10	FY11	FY12
ADEC 67114	\$ 18,715.20	\$	\$	\$
City Matching Funds	\$ 8,020.80	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
Total:	\$ 26,736	\$	\$	\$

Capital funds:	FY09	FY10	FY11	FY12
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
	\$	\$	\$	\$
Total:	\$	\$	\$	\$

Expenses (list the affected line item name and number):

Operating funds:

	FY09	FY10	FY11	FY12
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
Total	\$ _____	\$ _____	\$ _____	\$ _____

Enterprise funds:

	FY09	FY10	FY11	FY12
02-XXXX	\$ 26,736	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
Total:	\$ 26,736	\$ _____	\$ _____	\$ _____

Capital funds:

	FY09	FY10	FY11	FY12
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
	\$ _____	\$ _____	\$ _____	\$ _____
Total:	\$ _____	\$ _____	\$ _____	\$ _____

Are new positions required? Yes No

Position Title:

Position Type (full-time, part-time, temporary):

Approximate Cost:

_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____

List impacts on existing programs created by the proposed legislation:

There will be no impacts to existing programs as a result of this action.

Fiscal effects of not passing the legislation:

January 26, 2009

File: 79-004

Carter Cole
Director of Public Works
City of Palmer
231 W. Evergreen Avenue
Palmer, AK 99645

**Re: Proposal for Geotechnical Services
Wastewater Treatment Plant Subsurface Discharge System**

Dear Mr. Cole:

We are pleased to submit this proposal for geotechnical studies at the proposed subsurface discharge area adjacent to the wastewater treatment plant. We understand that the purpose of the work is to gather soil and groundwater data, including in-situ moisture content, grain size, soil profile, percolation rates, and presence of groundwater. The information collected will be used by the City to evaluate the site's suitability for subsurface wastewater discharge. We understand the property is privately-owned and that a right-of-entry agreement is in place. The following presents our proposed scope of work:

SCOPE OF WORK

We propose to advance a total of 15 borings: 4 borings will be to 40 feet and 11 borings to 20 feet. The borings will be approximately equally spaced across the site. We will identify each boring location in the field and have the utilities located for each boring prior to drilling. We do not anticipate any utility conflicts; we will relocate borings when necessary to avoid utilities. The location and elevation of each boring will be recorded using GPS survey equipment. We will use existing survey control at the wastewater treatment plant from previous projects. We assume that the control monuments are still present and usable.

An engineering geologist will be on-site during the drilling in order to evaluate the nature of the soils, collect samples, and to observe the drilling action. Discovery Drilling of Anchorage, Alaska will be our drilling subcontractor. We will obtain spilt spoon samples at 2.5-foot and 5-foot depths and at 5-foot intervals thereafter. For the deeper borings, the sample spacing maybe increased to 10-foot intervals at higher depths depending upon the characteristics of the soils encountered. The borings will be backfilled with native material.

Prior to backfill, a 1-inch slotted PVC pipe (piezometers) will be placed in each of the deep borings to monitor fluctuations in groundwater levels, particularly through spring breakup. The piezometers will extend approximately 1 to 2 feet above the immediate ground surface and will be capped. Approximately one to two weeks after the drilling is completed, groundwater levels will be measured in each of the piezometers.

Scott Hattenburg, PE

Lorie Dilley, PE/CPG

Dennis Linnell, PE

David Lundin, PE

3335 Arctic Boulevard	Suite 100	• Anchorage	Alaska	99503	• Phone: 907.564.2120	• Fax: 907.564.2122
202 W. Elmwood Avenue	Suite 1	• Palmer	Alaska	99645	• Phone: 907.746.5230	• Fax: 907.746.5231
105 Trading Bay	Unit 101	• Kenai	Alaska	99611	• Phone: 907.283.2051	• Fax: 907.564.2122

After borings are completed, laboratory results reviewed, and the City has determined the soil horizon into which the effluent will be percolated, we will coordinate with you to determine the locations and depths of four percolation test pits. We understand that the City will supply a backhoe to excavate and backfill the test pits at no cost. We anticipate that the percolation tests will be completed in a zone less than 15 feet below the present ground surface. The location and depths will depend upon the soils encountered during the drilling. Percolation tests are normally conducted in thawed ground with atmospheric temperatures above 32°F so we may need to take special precautions to insulate test holes or avoid unusually cold weather to properly conduct the tests. The percolation test results will be provided in units of inches per hour.

Select soil samples will be analyzed in our laboratory for moisture content and grain size. The grain size analyses will be used to estimate a permeability of the soils and can be compared against the percolation rates determined in the field. After the field and laboratory work is completed, a geotechnical report will be prepared presenting the geotechnical data and our interpretations of the subsurface conditions. The report will not present engineering recommendations. The report will include drilling logs and other data that was collected during the study. The report will be stamped by a professional civil engineer. We will supply one loose original and two bound copies of the report.

SCHEDULE

We can begin work as soon as a notice to proceed is received. We anticipate it will take about ten-days to schedule a drill rig, identify boring locations, and obtain utility locates. The drilling will be accomplished in about four days. Excavation of the tests pits will take about a day and the percolation tests generally take about two days to complete, with backfill of the test pits to follow. Laboratory analyses of the samples will require one week. We anticipate the report can be prepared and finalized in approximately one week after the field and laboratory testing are completed.

COST PROPOSAL

We propose to provide the aforementioned services on a time and material basis at our published hourly rates for not-to-exceed \$26,736 as detailed on the attached fee worksheet. We look forward to working with you on this very important project. If you have any questions, you can contact me at 564-2120.

Sincerely,
HATTENBURG DILLEY & LINNELL, LLC



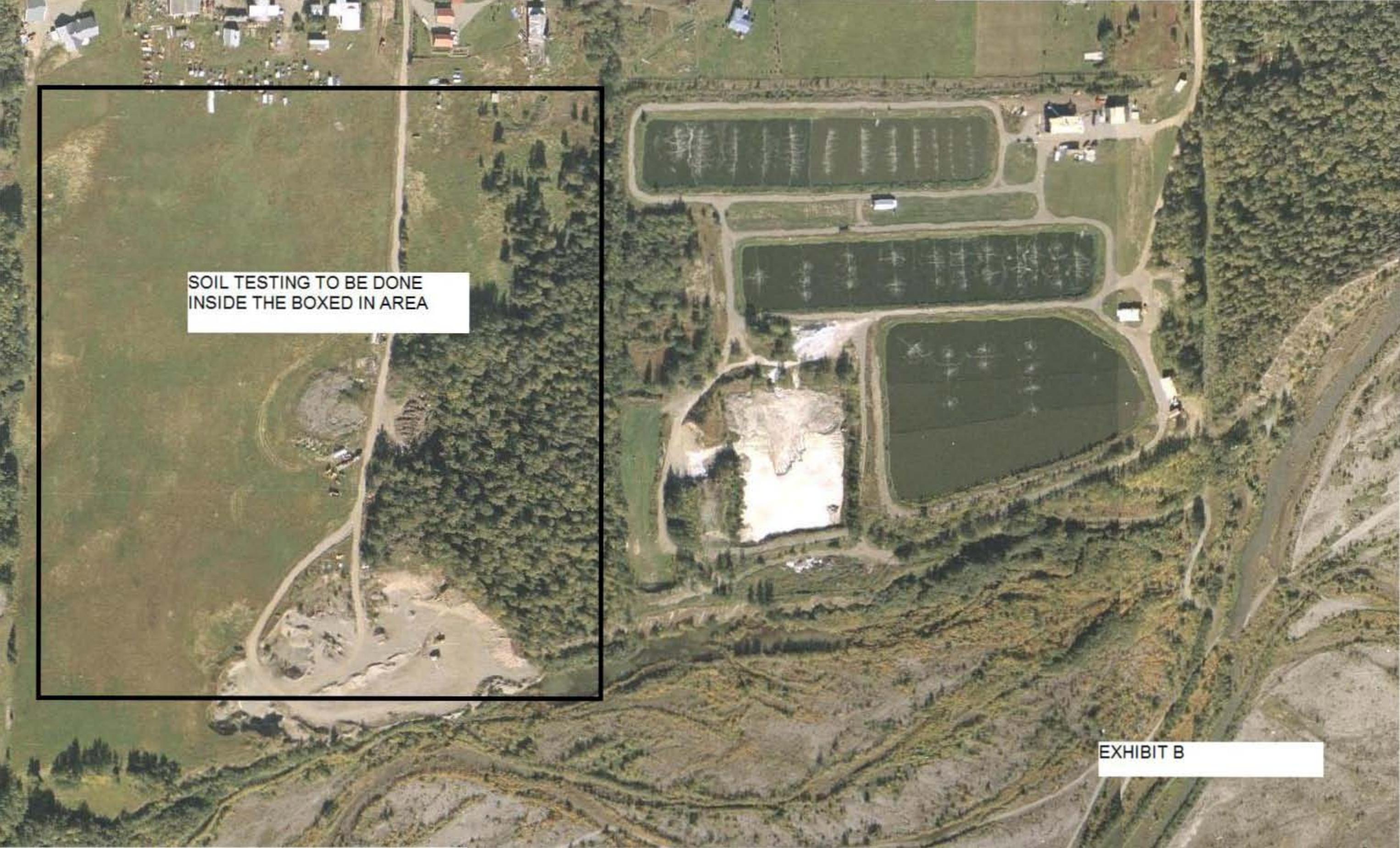
Lorie M. Dilley, P.E./C.P.G.
Principal Geotechnical Engineer

Attachment: Fee Worksheet (1 page)

H:\proposals\79-004 Palmer WWTP Subsurface Discharge\proposal.doc

Project: **Palmer WWTF Subsurface Discharge**
 Engineer: Hattenburg Dilley & Linnell, LLC
 Services: Geotechnical Services
 Date Prepared: 1/26/2009

<u>TASK</u>	<u>ACTIVITY</u>	<u>QTY</u>	<u>RATE</u>	<u>HDL LABOR</u>	<u>SUB- CONTRACT</u>	<u>REIMB</u>	<u>TASK TOTAL</u>	
1.1	Fieldwork (drilling)						\$	15,620
	Project Manager	8 hrs	@ \$ 160	\$ 1,280				
	Project Geologist	40 hrs	@ \$ 85	\$ 3,400				
	One-person Survey Crew	8 hrs	@ \$ 135	\$ 1,080				
	Mob/Demob Drill Rig	1 ea	@ \$ 1,900		\$ 1,900			
	Drilling	300 ft	@ \$ 26		\$ 7,800			
	Piezometers	160 ft	@ \$ 1		\$ 160			
1.2	Fieldwork (test pits)						\$	3,590
	Project Geologist	24 hrs	@ \$ 85	\$ 2,040				
	Perc Test Equipment	4 ea	@ \$ 200			\$ 800		
	Heat and Insulation	1 Allow.	@ \$ 750			\$ 750		
	Mob/Demob Backhoe (city)				\$ -			
	Backhoe(city)	0 hrs	@ \$ 0		\$ -			
1.3	Laboratory						\$	2,500
	Grain Size Analysis	20 ea	@ \$ 75			\$ 1,500		
	Moisture Content	100 ea	@ \$ 10			\$ 1,000		
1.4	Report						\$	4,040
	Project Manager	8 hrs	@ \$ 160	\$ 1,280				
	Project Geologist	24 hrs	@ \$ 85	\$ 2,040				
	AutoCAD Drafting	8 hrs	@ \$ 90	\$ 720				
SUBTOTAL				\$ 11,840	\$ 9,860	\$ 4,050	\$ 25,750	
10% Markup					\$ 986		\$ 986	
TOTAL				\$ 11,840	\$ 10,846	\$ 4,050	\$ 26,736	

An aerial photograph of a wastewater treatment plant. The plant consists of several large, rectangular aeration tanks, a central clarifier, and various pipes and walkways. A large area of the plant is enclosed in a black rectangular box. A white text box is overlaid on the left side of the image, pointing to the boxed area. The surrounding landscape includes green fields, a road, and a river or stream in the lower right.

SOIL TESTING TO BE DONE
INSIDE THE BOXED IN AREA

EXHIBIT B