



April 1, 2019

Lumberton Fire Company

561 Main Street
Lumberton, NJ 08048
Attn: Mr. Louis Kanicki

**RE: Site Remediation Proposal
Lumberton Fire Company Property located at 561 Main Street, Lumberton, NJ
NJDEP Case #11-10-28-1722-24**

Dear Mr. Kanicki,

Meridian Environmental Services Inc. (Meridian) submits the following cost estimate and proposal to perform soil remediation at the above referenced site. Our proposal is based on the excavation and disposal of approximately 350 tons of impacted soils, as based on a delineation previously performed by Meridian. Impacted soil will be excavated to an estimated depth of 10' below ground surface (bgs). Groundwater was encountered at 5-5.5' bgs during previous phases of the project.

It was determined during our investigations that soil and groundwater were found to be in excess of applicable NJDEP standards. Remediation is required for both soil and groundwater. This estimate will attempt to remediate soil below the Residential Direct Contact Soil Remediation Standard ("RDCSR") of 5,100 ppm in order to submit for a No Further Action ("NFA") Letter with the New Jersey Department of Environmental Protection ("NJDEP"). All work will be performed in accordance with the NJDEP Technical Regulations for Site Remediation ("TRSR").

Costs to perform the required remedial work will include the personnel, equipment, materials and disposal and will be billed on a time and materials basis. **Please note that the actual quantity of oil impacted soil, as well as the time/materials involved were estimated and may vary from our proposal.**

Task One - Project Preparation

A waste classification will be submitted to Pure Soil Technologies for their approval. Pure Soil will be accepting impacted soil for disposal.

Meridian will need to remove additional asphalt in the parking lot in order to access the excavation area. Because structural support of the building is necessary, Meridian will have a representative perform a pre-project walkthrough. The Meridian representative will note any existing structural concerns. Photo documentation will be utilized to document the present condition of the building and street.

Task Two – Structural Support

Based upon our findings during the soil and remedial investigation procedures, soil is in excess of the applicable NJDEP soil remediation levels and is likely located under the footing and foundation of the building. In order to safely excavate soil near or partially beneath the building, structural support will need to be installed.

Prior to the excavation of activities, Meridian will install a series of helical piers beneath the footings. For proposal purposes we are estimating the installation of approximately five (5) helical piers. Prior to their installation, our structural engineer will design a support plan that will be submitted to Lumberton Township for their review and approval. The actual number of piers will be dictated by our structural engineer after their initial site visit.

If necessary, a small portion of the concrete slab inside the building will need to be removed. However, we will attempt to leave the slab in place. We recommend that any moveable items be relocated at least 10 from outside wall.

Task Three – Dewatering

Meridian will dewater the excavation via multi point dewatering system. Sumps will be installed in select locations along with a vacuum truck being onsite all day during the remediation. The cost for this dewatering approach has been included on the attached spreadsheet. We have estimated 10,000-gallons for the project but we will bill impacted water at \$0.65 per gallon. All impacted groundwater will be disposed of at a licensed recycling facility.

An On-Scene Coordinator (“OSC”) or Permit-By-Rule (“PBR”) permit will be submitted for to the NJDEP for discharge approval. Once the permit is approved Meridian will install a multi-point treatment system surrounding the impacted area. PVC points will be water jetted to an approximate depth of 12’ below ground surface (bgs). The system will consist of 1” PVC dewatering points spaced approximately 3’-4’ apart and connected to a 6” header system that will surround the excavation. The point/header system will be connected to a 6” diesel pump staged on-site.

The pump will draw water through the point/ header system and discharge the impacted water into a 10,000 gallon holding tank. There will be a 2” electrical pump located within the holding tank that will pump the impacted water through 2-1000 pound granular activated carbon units. The effluent portion of the second carbon vessel will be connected to 2” hoses that will run along the property and discharged into the nearest storm water catch basin or infiltration pit, whichever is approved by the NJDEP.

Task Four - Removal of Impacted Soil

Once the helical piers and groundwater suppression system has been installed, Meridian will commence with the removal of the impacted soil. Clean overburden soil will be excavated and stockpiled on-site to be reused as clean backfill where possible. We will be utilizing a track excavator to perform the necessary excavation work. Impacted soil will be direct loaded into awaiting Tri-axles dump trucks. The soil will be transported to the licensed recycling facility for disposal. Impacted soil will be removed to an estimated depth of 10.0’ bgs.

Task Five – Soil Sampling

Meridian will be excavating impacted soil to the extent as identified during our previously performed soil remedial investigations. These samples were collected to delineate the extent of soil impact as well as to provide the approximate excavation limits. ***Please note we were unable to complete borings through the concrete floor in the building thus there are some unknown limits still associated with soils under the building.*** Meridian will collect post excavation soil samples as needed from the final excavation sidewall and base. Meridian has listed the costs associated with the collection of eighteen (18) soil samples required to complete the post excavation sample locations as per NJDEP requirements.



Task Six – Backfill Excavation

At the completion of the soil remediation, Meridian will immediately commence with backfilling of the excavation. The excavation will be backfilled with ¾” crushed stone up to the static groundwater table and non-shrinking flowable fill to prevent settling under the existing footing and foundation. The clean overburden will be returned to the excavation outside of the building footprint. Any additional fill will be certified clean from an outside source.

Task Seven – Site Restoration

Restoration will be limited to backfilling the excavation to grade with clean ¾” crushed stone and clean fill. The excavation will be topped with R-blend awaiting final asphalt replacement. Meridian has provided a rough estimate for asphalt repair and to repair the loading dock. Actual cost will depend on total impacted area. Any additional site restoration not included in this written estimate will be submitted in a change order and must be approved prior to completion. **Asphalt repair has been left off this estimate.**

Task Eight – Post Excavation Monitoring Well Installation and Groundwater Sampling

Groundwater

Meridian will install two (2) temporary well points (“TWPs”) after Task 7 has been completed. The TWPs will be installed to an expected depth of 7.0’ bgs. Groundwater was determined to be approximately 5.0-5.5’ bgs during the previous sampling performed onsite.

Following the installation of the TWPs the wells will be purged with 3 to 5 well volumes and sampled utilizing a dedicated Teflon Bailer as per NJDEP Field Sampling Procedures Manual. All samples will be placed in laboratory supplied glassware and submitted to a state certified testing lab for Volatile Organic Compounds (VO+15) and Base Neutral Analyses (BN+15 with Selected Ion Monitoring (“SIM”).

Laboratory analytical results from the sample locations will document the current groundwater quality in the area. The data will be tabulated and compared to NJDEP's Ground Water Quality Standards (GWQS) to determine if groundwater contamination still exists. **Please note two consecutive (2) rounds of clean groundwater at least 30 days apart will be required in order to abate the case with the NJDEP.**

Task Eight – Reporting

A Remedial Action Report (RAR) outlining the project will be prepared and submitted to the NJDEP. Any NJDEP fees are the responsibility of the client. The lump sum cost of the report includes the preparation of the Report, any NJDEP forms and the RAO for recommendation of case closure with the NJDEP.

Price

We intend to perform the on-site remedial activities at this site in approximately (8) workdays, plus reporting time, groundwater sampling and final site restoration. The actual cost for this project will be billed on a time and material basis as per the rates on the attached spreadsheet, and therefore will be dependent on the actual time involved, materials used, and volume of impacted soil generated. The client will only be billed for services performed. Any change in scope of work must be approved in writing by the client prior to commencing with the work

Meridian proposes to furnish the equipment, labor and materials for the Scope of Work detailed above for an **estimated cost of \$85,575.00** as per the attached spreadsheet breakdown. All invoices will be submitted directly to the client for payment and **a professional discount of 3% will be added to each invoice for an**



estimated total of \$83,007.75. We will work diligently to try to complete the project in less time than proposed.

If you would like us to commence with the project, we kindly ask that you sign the attached acceptance form and forward it to our office at your earliest convenience with a retainer in the amount of **\$40,000.00**. Upon receipt of your acceptance and receipt of the required retainer, we will begin the preliminary work required before commencing with your project. The remainder of the client's responsibility will be due after the presentation of any progress invoices. **The professional discount will only apply on invoices paid within 30 days of receipt.** The client agrees to pay a 1.5 % monthly service charge on all past due balances in addition to any attorney fees and other collection expenses.

In the event that the total cost of the project exceeds this estimated cost, Meridian will generate a change order listing all the tasks and costs necessary to complete the job.

Thank you again for allowing Meridian the opportunity to serve your environmental needs. Should you have any questions regarding this information, please feel free to contact me at 732-281-1900.

For the Firm;
MERIDIAN ENVIRONMENTAL SERVICES, INC.



Jonathan Dean
Project Manager/LSRP #748558

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Terms and Conditions

- a) If after the implementation of these remedial activities our understanding of subsurface conditions change or an increase of impacted soil/ground-water is discovered, the responsible party will incur the costs to modify the scope of work accordingly. The property owner must approve any change in the scope of work or cost in advance.
- b) The cost estimate provided is based upon a time and material basis. The actual cost to complete the project will be billed according to Meridian's fee schedule.
- c) MERIDIAN will request an underground utility mark out by calling NJ One Call at 1-800-272-1000. It is the client's responsibility to locate and mark out any private utilities at the site. If any utilities, public or private, are in conflict with the performance of our work it will be the client's responsibility to pay for the relocation of those utilities. MERIDIAN will take all care to avoid any utilities that are brought to our attention. In the event that any utility is damaged it will be the client's responsibility to repair or replace the damaged service. MERIDIAN is not responsible for any interruption in utility service.
- d) In the event that the migration of oil impacted soil or groundwater requiring remediation extends horizontally or vertically beyond the estimated limits of contamination, the installation of additional structural support may be necessary. If this is the case Meridian will need to temporarily stop work, secure the excavation, and generate a change order listing the additional costs and tasks related to the installation of additional structural support and/or the remediation of additional soil and groundwater. The installation of additional structural support may also be necessary based upon soil classification, groundwater influence, field observations, or recommendations of our structural support engineer. Work will recommence at the site once the client has approved the change order.
- e) Additional engineering costs may apply if the municipality requires a geo-technical boring in order to approve the helical pier support plan.



- f) This proposal only includes restoration tasks as outlined in our scope of work.
- g) Total costs for the project are billed as a time and material basis as per the attached spreadsheet with an estimated total of **\$85,575.00 and \$83,007.75 with the 3% professional discount if paid within 30 days of receipt.**
- h) No documentation will be released until the balance of the project is paid in full.
- i) A retainer in the amount of **\$40,000.00** is requested from the client prior to the start of the project.
- j) An additional \$95.00 per foot/per pier cost will apply if the installation of the helical piers extends to a depth greater than 17' below the footing of the dwelling.

By signing below the Responsible Party indicates that he or she has read the entire proposal and accepts it in its entirety as a binding contract. The undersigned also authorizes Meridian to sign soil recycling documentation on their behalf.

Print

Signature

Date



Lumberton Fire Company
 561 Main Street, Lumberton, NJ

Cost Estimate Page 1 of 1

Personnel

	Rate/hour
Project Manager (Project Coordination/During Project)	\$95.00
Site Supervisor	\$70.00
Field Technician	\$47.00
Operator	\$55.00
Project Manager (Site Preparation/Leading up to start)	\$95.00
Project Manager (Site Restoration)	\$95.00

	Day 1-2 HPI	Day 3 DSI/SR	Day 4 SR	Day 5 SR	Day 6 SR	Day 7 BF	Day 8 BF	
	5							\$475.00
	5	10	10	10	10	10	10	\$3,850.00
	5	10	10	10	10	10	10	\$2,585.00
	5	10	10	10	10	10	10	\$3,025.00
	5							\$475.00
							2	\$190.00

Vehicles and Equipment

	Rate/day
16,000 lb. Excavator	\$600.00
Tri-Axel Dump Truck	\$400.00
Utility Vehicle	\$125.00
Groundwater Sampling Event* <i>*(Includes Technician, Vehicle and Equipment)</i>	\$1,000.00
Site Vehicle	\$75.00
Concrete Cut Saw	\$125.00
12 ton Rolling Compactor	\$500.00

	Day 1-2 HPI	Day 3 DSI/SR	Day 4 SR	Day 5 SR	Day 6 SR	Day 7 BF	Day 8 BF	
	0.5	1	1	1	1	1	1	\$3,300.00
						1	1	\$800.00
	1	1	1	1	1	1	1	\$750.00
							2	\$2,000.00
				1	1			\$75.00
			1					\$125.00
						1	1	\$1,000.00

Chain Link Safety Fence (per job)

Rate/Per Job

\$450.00

	1							\$450.00
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Dewatering Equipment, Services, and Materials

Multi-Point Dewatering System (cost +15%)	\$5,600.00
<i>Initial set-up and 7 days of operation (pump, labor, install points)</i>	
2,500 gal. Holding Tank (per month)	\$250.00
Carbon Water Filtration Units and Meters (2-1000 lb. units)	\$5,700.00
Carbon Testing (TCLP) and Disposal	\$800.00
Start-up and System Sampling (Dictated by Township/Estimated)	\$750.00
Particulate Filters (for sediment housing/each)	\$8.00
Filtration System Maintenance(each)	\$150.00
Pumps and Hoses (per week)	\$350.00
<i>Filtration system maintenance will only be charged for days not actively on-site and will include labor and equipment to maintain the system.</i>	
Cleaning of Holding Tank (each)	\$850.00

	1							\$5,600.00
	1							\$250.00
	1.15							\$6,555.00
	1.15							\$920.00
	1.15							\$862.50
	10							\$80.00
	2							\$300.00
	1							\$350.00
							1	\$850.00

Materials

	Each
3/4" Clean Stone/ton	\$30.00
Clean Fill/ton	\$20.00
R-Blend	\$25.00
Flowable fill (under footing/slab)	\$150.00

					250			\$7,500.00
					50			\$1,000.00
					50			\$1,250.00
					1.15			\$172.50

Disposal (Estimated)

	Each
Impacted Soil (per ton)(Transport and Disposal)	\$60.00

	375							\$22,500.00
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Analytical

	Per Sample
<u>Soil</u>	
EPH	\$110.00
<u>Groundwater</u>	
Volatile Organic Compounds (VOCs)	\$95.00
Base Neutral Analysis	\$265.00

					18			\$1,980.00
					6			\$570.00
					4			\$1,060.00

Services (estimated/Cost + 15%)

Helical support plan, including engineers site visit	\$2,000.00
Installation of 3.5" round shaft helical piers	\$1,600.00
Concrete Repair	\$750.00
Relocate AST and Generator	\$1,500.00
Township Permits (at cost)	\$400.00

	1.15							\$2,300.00
	5							\$8,000.00
						1		\$750.00
	1.15							\$1,725.00
	1							\$400.00

Reporting

	Lump Sum
Remedial Action Report with Forms	\$1,500.00

						1		\$1,500.00
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Estimated Total = \$85,575.00
Estimated Total with 3% Professional Discount = \$83,007.75

SP = Site Preparation

DSI = Dewatering System Installation

SR = Site Remediation

BF = Backfilling