

COPY

Additional Information for

Technical Proposal

(RFP #03-07-22)

*Feasibility-Level Environmental
Conditions Studies for a Potential Island
Restoration Project at Barren Island
Dorchester County, MD*

**Maryland Environmental Service
Annapolis, Maryland**

February 2003

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

PROPOSAL

Additional Information for

*Technical Proposal
(RFP #03-07-22)*

*Feasibility-Level Environmental
Conditions Studies for a Potential Island
Restoration Project at Barren Island
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**Maryland Environmental Service
Annapolis, Maryland**

February 2003

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Transmitted Via Hand Delivery

February 11, 2003

Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, MD 21401

Attn: Ms. Patrice L. Stanley
Procurement Division

Re: Addition Information for Technical Proposal for Feasibility-Level Environmental Conditions
Studies for a Potential Island Restoration Project at Barren Island – MES RFP ID# 03-07-22

Dear Ms. Stanley:

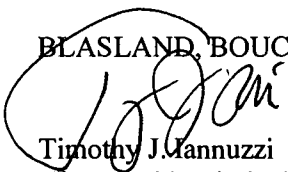
Enclosed are five copies of the following additional information for Blasland, Bouck & Lee, Inc.'s (BBL's) Technical Proposal for the above-referenced project:

- Revised Standard Form 254 for BBL
- Revised Project Descriptions for Standard Form 255 for BBL
- New Standard Form 254 for each of our subconsultants:
 - Normandeau Associates, Inc.
 - Air, Water & Soil Laboratories, Inc.
 - E2CR, Inc.

We trust you now have all the information necessary to review BBL's proposal. However, if we can provide you with anything else, please don't hesitate to call me at 410-295-1205. We sincerely appreciate your cooperation in this matter.

Sincerely,

BLASLAND, BOUCK & LEE, INC.


Timothy J. Mannuzzi
Vice President/Principal

TJI/krm

Enclosure: 1 original and 4 copies of proposal

cc: C. Tombes (AWSL)
S. Balu, P.E. (E2CR)
G. Christian (Normandeau Associates)

Revised Standard Form 254

Blasland, Bouck & Lee, Inc.

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

**STANDARD
FORM (SF)**

254

ARCHITECT-ENGINEER
AND RELATED SERVICES
QUESTIONNAIRE

1. Firm Name/Business Address:

Blasland, Bouck & Lee, Inc.
326 First Street, Suite 200
Annapolis, MD 21403-2678

2. Year Present Firm Established:
1984

3. Date Prepared:
February 5, 2003

4. Specify type of ownership and check below, if applicable.

Corporation, Federal I.D. #16-1448024, D&B #107398604

Small Business

Small Disadvantaged Business

Woman-Owned Business

1a. Submittal is for Parent Company Branch of Subsidiary Office

5. Name of Parent Company, if any:

Blasland, Bouck & Lee, Inc.
6723 Towpath Road, P.O. Box 66
Syracuse, NY 13214-0066

5a. Former Parent Company Name(s), if any, and Year(s) Established:

6. Names of Not More Than Two Principals to Contact: Title/Telephone

- 1) Timothy J. Iannuzzi, Principal Ecologist (410) 295-1205
- 2) David F. Ludwig, Ph.D., Principal Scientist (410) 295-1205

7. Present Offices: City/State/Telephone/Number of Personnel Each Office

7a. Total Personnel: 677

Please see attached list of offices

8. Personnel by Discipline: (List each person only once by primary function.) *Functions performed by Staff

<u>160</u> Administrative	<u>1</u> Electrical Engineers	<u>0</u> Oceanographers	<u>21</u> Toxicologists
<u>0</u> Architects	<u>*</u> Estimators	<u>1</u> Planners: Urban/Regional	<u>5</u> Atmospheric Scientists
<u>16</u> Chemical Engineers	<u>57</u> Geologists	<u>23</u> Sanitary Engineers	<u>52</u> Environmental Engineers
<u>49</u> Civil Engineers	<u>18</u> Hydrologists	<u>17</u> Soils Engineers	<u>10</u> Chemists
<u>28</u> Construction Inspectors	<u>0</u> Interior Designers	<u>*</u> Specification Writers	<u>61</u> Technicians
<u>25</u> Draftsmen	<u>2</u> Landscape Architects	<u>3</u> Structural Engineers	<u>69</u> Environmental Scientists
<u>23</u> Ecologists	<u>3</u> Mechanical Engineers	<u>4</u> Surveyors	<u>3</u> Industrial Hygienists
<u>20</u> Economists	<u>0</u> Mining Engineers	<u>0</u> Transportation Engineers	<u>6</u> Coastal Engineers

9. Summary of Professional Services Fee Received: (Insert Index Number)

Last Five Years (Most Recent Year First)

	2002	2001	2000	1999	1998
Direct Federal contract work, including overseas	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>2</u>
All other domestic work	<u>8</u>	<u>8</u>	<u>8</u>	<u>8</u>	<u>8</u>
All other foreign work *	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>

Ranges of Professional Services Fees Index

- | | |
|-----------------------------|--------------------------------|
| 1. Less than \$100,000 | 5. \$1 million to \$2 million |
| 2. \$100,000 to \$250,000 | 6. \$2 million to \$5 million |
| 3. \$250,000 to \$500,000 | 7. \$5 million to \$10 million |
| 4. \$500,000 to \$1 million | 8. \$10 million or greater |

* Firms interested in foreign-work, but without such experience, check here:

**Attachment to SF 254 Form
Blasland, Bouck & Lee, Inc.**

7. Present Offices

City/State	Telephone	Number of Personnel
Albany, NY	(518) 452-7082	5
Ann Arbor, MI	(734) 668-1133	19
Annapolis, MD	(410) 295-1205	9
Atlanta Area, GA	(770) 428-9009	14
Boca Raton, FL	(561) 750-3733	27
Boston Area, MA	(978) 921-0442	5
Buffalo Area, NY	(716) 689-1544	6
Chicago, IL	(312) 674-4937	4
Cincinnati, OH	(513) 762-7888	2
Cranbury, NJ	(609) 860-0590	51
Detroit Area, MI	(248) 377-9162	13
Durham, NC	(919) 544-2244	23
Golden, CO	(303) 231-9115	17
Hartford, CT	(860) 249-7111	1
Irvine, CA	(949) 474-9052	17
Lexington, KY	(859) 253-9036	10
Long Beach, CA	(562) 628-1176	16
Naples, FL	(239) 403-3884	2
New Bedford, MA	(508) 992-3609	5
Pensacola, FL	(850) 492-8220	1
Philadelphia Area, PA	(484) 530-9119	15
Piscataway, NJ	(732) 457-0700	20
Pittsburgh, PA	(412) 231-6624	20
Portland, OR	(503) 535-0696	1
Raleigh Area, NC	(919) 469-1952	17
Reston, VA	(703) 834-0076	9
Rochester, NY	(585) 292-6740	16
Russellville, KY	(270) 725-8400	1
San Francisco Bay Area, CA	(925) 274-1100	1
San Rafael, CA	(415) 492-2844	4
Santa Barbara, CA	(805) 684-4066	3
Seattle, WA	(206) 273-7555	3
St. Louis Area, MO	(636) 898-0050	1
Syracuse, NY	(315) 446-9120	286
Tallahassee, FL	(850) 309-0022	4
Tampa, FL	(813) 933-0697	13
White Plains, NY	(914) 428-1112	16

10. Profile of Firm's Project Experience, Last 5 Years											
	Profile Code	Number of Projects	Total Gross Fees (in Thousands)		Profile Code	Number of Projects	Total Gross Fees (in Thousands)		Profile Code	Number of Projects	Total Gross Fees (in Thousands)
1)	004	21	490	11)	073	3	75	21)	101	12	5,200
2)	009	19	850	12)	076	26	1,000	22)	102	210	5,000
3)	021	6	570	13)	078	6	4,810	23)	104	14	2,700
4)	023	8	40	14)	079	8	4,000	24)	106	14	150
5)	028	22	2,170	15)	083	8	320	25)	114	39	6,650
6)	033	17	2,900	16)	088	8	310	26)	115	6	1,350
7)	037	31	20	17)	092	21	7,200	27)	255	56	4,200
8)	042	16	10,700	18)	096	34	13,500	28)	258	14	790
9)	054	9	390	19)	097	32	5,200	29)	262	24	4,000
10)	056	3	360	20)	099	75	5,550	30)	266	56	245,000

11. Project Examples, Last 5 Years					
Profile Code	P, C, JV or IE	Project Name and Location	Owner Name and Address	Cost of Work (in Thousands)	Completion Date (Actual or Estimated)
028, 033, 037, 262	P	<p>1. CERCLA Remedial Investigation, Estuarine Portion of the Passaic River, New Jersey – BBL is the lead firm conducting a remedial investigation for contaminated sediments in a 6-mile stretch of the Passaic River. Conducted a one-year study as part of this investigation to characterize the ecology of the river and collect data to support an ecological risk assessment. BBL collaborated to perform fisheries and benthic invertebrate surveys, habitat surveys of the river and shoreline areas, water quality investigations, and collections of sediment samples and tissue samples from multiple fish species and blue crab for contaminant analyses. In addition, designed and conducted a detailed, multi-season, year-long bird survey on the river. BBL scientists and economists also designed and implemented a state-of-the-science Creel/Angler Survey of the river to determine human recreational usage and fish consumption patterns.</p>	<p>David Rabbe, President 732-246-5848 Tierra Solutions, Inc. Two Tower Center Boulevard 10th Floor East Brunswick, NJ 08816</p>	\$1,000	2001

028, 033, 215, 262	P	2. Stone Harbor Piping Plover Dredging/Beneficial Re-Use Habitat Restoration Project, New Jersey – Supporting the Borough of Stone Harbor, NJ, in evaluating the possible use of dredge materials from the dredging of Stone Harbor navigation channels for dune construction for piping plover habitat. Recently designed and conducted a sediment sampling program for a temporary confined disposal facility (CDF) on the beach adjacent to the harbor. These samples are being used to conduct bioaccumulation tests to determine if any risks exist from contaminants in the CDF. Test results will be used to conduct a focused risk assessment for piping plovers that might be exposed to the dredge materials.	Harry Weiss, Esq. 215-864-8129 Ballard Spahr Andrews & Ingersoll, LLP 1735 Market Street, 51 st Floor Philadelphia, PA 19103-7599	\$95	2003
028, 211, 258	P	3. Habitat and Ecological Characterization, Tidal River/Estuary Site, Northeastern United States – Characterized terrestrial habitats and resident biota species for three former agricultural chemical sites along a tidal river/estuary. Activities included upland and wetlands habitat characterization, wetlands delineation, and ecological risk evaluations. These studies indicated that the primary ecological issues at these sites were associated with sediments and salt marsh areas along the river. The ecological assessment also provided a basis for excluding large areas of the site that were developed and located in upland areas from further consideration in the ecological risk assessment.	Confidential Petroleum Manufacturer Client	\$30	2002
028, 214, 262, 258	P	4. Submerged Aquatic Vegetation (SAV) and Wetlands Surveys, New York – Using SCUBA, characterized stem density, stem length, biomass, and bed size of American wild celery (<i>Vallisneria americana</i>) in freshwater reaches of a large river in New York. Underwater transects and a random plot design were used to estimate structural parameters of SAV in over 6 miles of river bottom. The use of various species of phytophilous macroinvertebrates and fish were noted in logbooks. The locations, sizes, and types of species in emergent wetlands along the border of the river's edge were mapped. The information was used to establish a range of expected SAV habitat and wetland conditions in an adaptive management framework for restoration.	Confidential Manufacturer Client	\$30	2002
042, 073, 079, 097, 258	IE	5. Poplar Island Restoration and Other Chesapeake Bay Projects, Maryland – Provided project management for the wetlands and hydraulic planning aspects of the Poplar Island Restoration project. This project involved restoration of over 1,100 acres of wetlands and upland habitats in Chesapeake Bay using dredged material from the Port of Baltimore's shipping channels. BBL staff were also involved in design, planning, and operational studies for several other island/CDF projects in the bay, including the Upper Bay Islands Study.	Frank Hamons 410-631-1102 Maryland Port Administration One Maritime Center 2310 Broening Highway Baltimore, MD 21224 Wayne Young 410-974-7261 Maryland Environmental Service 2011 Commerce Park Drive Annapolis, MD 21401	\$150	2001

028, 033, 258, 262	IE	6. Tabbs Creek Sediment and Aquatic and Wetland Sampling Program, Chesapeake Bay, Virginia – BBL staff designed, managed, and implemented a comprehensive aquatic ecological investigation in support of an ecological risk assessment for contaminants in Tabbs Creek, a tidal tributary of the Back River in the lower Chesapeake Bay. The program included a fish seine investigation to collect multiple estuarine species, as well as a variety of trap and net sampling techniques for blue crab, shrimp, fish, and turtles. In addition, conducted detailed habitat surveys and wetlands delineation/assessment of the tidal marshes and surrounding areas. Also performed a sediment and water quality investigation. The results were used to construct a food web exposure model and assess the risks of contaminants in the creek to invertebrates, fish, and waterbirds, and to evaluate the likely risks to the tidal marsh system from various remedial options.	NASA Langley Research Facility, Virginia	\$75	1993
028, 033, 258, 262	IE	7. Aquatic and Wetland Sampling Program, Nanticoke River, Chesapeake Bay, Virginia – BBL staff implemented an ecological risk assessment for contaminated sediments and biota at the Navy Drive Facility on the Nanticoke River in southern Virginia. Performed ecological investigations of the tidal marsh habitats adjacent to the facility. These included fish and blue crab sampling using a variety of trap and net sampling techniques, wetlands delineation/assessment, habitat characterization, and sediment and water quality sampling and analysis. The results were used to characterize the ecology of the site and to assess risks to aquatic organisms (i.e., benthic invertebrates, blue crab, fish, and birds) from contaminants at the facility.	United States Navy Driver Facility, Virginia	\$50	1992
028, 033, 092, 262	P	8. Ecological Investigation, Alabama – Characterized floodplain habitat types, including wildlife corridors and “edge” habitats, in the floodplain of a large creek in Alabama. Using GPS, established transects in the floodplain that were perpendicular to the creek for surveying during two seasons of high and low water. Identified species of groundcover, understory, and canopy vegetation and observed wildlife by sight or sign (browse, day beds, scat, etc.). Developed data base of vegetation and wildlife information and used this to ground truth aerial photography of floodplain along 39 miles of the creek. This information was used to support exposure assumptions for a detailed ecological risk assessment.	Confidential Chemical Manufacturer Client	\$500	2003
028, 033, 079, 092, 102, 258, 262, 266	P	9. Lake Okeechobee Sediment Management Services, Florida – Provided sediment management support services related to organics and inorganics in 730 square miles of Lake Okeechobee since January 2000. Work has included: development of goals and performance measures; public and interagency outreach plans and meetings; evaluation of physical and chemical sediment data; feasibility study (to evaluate dredging, capping, and other technologies) and beneficial reuse of both treated waters and remaining solids; sediment fate and transport modeling; and coordination with USACE, USFWS, and the state.	Jorge Patino 561-682-2731 South Florida Water Management District 3301 Gun Club Road West Palm Beach, Florida 33416	\$955	2003
033, 042, 073, 097, 262	P	10. Sharps Island Restoration, Maryland – Conducted pre-feasibility study evaluations to assess restoration options of Sharps Island using dredged material from the Port of Baltimore. The work involved consideration of environmental, geotechnical, coastal, and dredging aspects, including CDF design elements.	Wayne Young 410-974-7261 Maryland Environmental Service 2011 Commerce Park Drive Annapolis, MD 21401	\$68	2002


028, 033, 037, 262	IE	11. Environmental Impact Assessment for Davids Island Redevelopment Project, Long Island Sound, New York – BBL staff managed and implemented a comprehensive aquatic ecological investigation to collect sufficient data to assess the environmental impacts from a proposed redevelopment of a former military island in Long Island Sound. The proposal included plans for the construction of an 800 slip marina, which would have required deepening of 17 acres of intertidal habitat. Ecological investigations included fisheries surveys (trawl and seine studies), benthic invertebrate surveys, plankton and algae investigations, delineation of a rare mussel bar habitat, and quantification of primary (algal) production on various substrates and at various depths surrounding the island. These data were used to support a feasibility study for the redevelopment project.	Confidential Law Firm Client	\$300	1992
028, 033, 204, 258	P	12. Wetlands and Terrestrial Ecology Investigation, New York – Performed extensive surveys of terrestrial vertebrates, macroinvertebrates, and wetland plant communities as part of an ecological investigation at a CERCLA site. Assessment of vegetative communities at the site included wetlands delineation and an evaluation of wetlands function and value in accordance with the USACE Wetlands Delineation Manual and Wetlands Evaluation Technique (WET). Study results successfully documented the limited impact to terrestrial small mammal, soil macroinvertebrate, and vegetative communities at the site, which reduced the size of the potential remediation area from 150 to 8 acres.	Confidential Metals Manufacturer Client	\$100	1995
028, 211, 258	P	13. Ecological Investigation, Puerto Rico – Designed and implemented an ecological assessment in association with RI/FS activities at a 100-acre site. The site included active manufacturing areas, subtropical moist forest areas, and mangrove swamps. Activities included habitat quality assessments, receptor species identification, and wetlands delineation. Information obtained in these investigations was used to develop a conceptual site model, including identification of potential ecological receptors and areas of potential concern for a subsequent ecological risk assessment.	Confidential Utility Client	\$60	2001
262, 028	P	14. Benthic Invertebrate and Fish Community Assessment, Ohio – Conducted a RCRA Facility Investigation (RFI) in response to a discharge of organic solvents to a nearby stream using USEPA Rapid Bioassessment Protocols (RBP). Work involved determining fish and benthic invertebrate community structure (e.g. species composition, abundance, diversity) both upstream and downstream of the release. The study concluded that stream ecology was not adversely affected by the release and that no additional investigation or remediation was necessary.	Safety Kleen 581 Milliken Drive Hebron, OH 43025	\$25	1991
262, 028, 033	P	15. Aquatic Habitat Surveys and Benthic Invertebrate Community Surveys, New York – Conducted aquatic habitat surveys and benthic community surveys in a pilot study area. The habitat surveys included characterizing epifaunal substrate and available in-stream cover, as well as bank vegetation and stability and cover-type composition of the riparian zone. Benthic community evaluations included multiple dredge and artificial substrate samples from locations upstream and downstream of a pilot dredging project. The study indicated that habitat quality and substrate characteristics affected the diversity, abundance, and distribution of aquatic biota in the river.	Confidential Metals Manufacturer Client	\$40	2002

262, 037	P	16. Fish Population Study – Conducted a study to determine if sediment and water column contaminants had a discernible effect on fish population density at a riverine Superfund site. Fish population sizes were estimated using repeated electrofishing passes and depletion estimation techniques. Results of the study showed that sportfish population densities were similar to or greater than reference sites and that levels of sediment contamination were having no significant impact on fish population density.	Confidential Engine Manufacturer Client	\$25	1994
262, 037	P	17. Riverine Fish Monitoring Program, Wisconsin – Designed and implemented a multi-year migratory salmonid fish monitoring program. The study involved measuring PCB levels in edible portions of migratory sport fish at the site and reference locations. The study demonstrated that fish in the river had tissue residues that were no greater than those observed in reference locations, probably due to the relatively short duration of river residence for these migratory species. As a result of this study, an existing agency prohibition on salmonid stocking was revisited and led to resuming the salmon stocking program.	Confidential Engine Manufacturer Client	\$70	1994
262, 211	P	18. Aquatic Biota Tissue Monitoring Program, Puerto Rico – Designed and implemented an aquatic tissue residue monitoring program in an estuarine environment adjacent to a coastal industrial facility. The program developed data to assess the extent of biological uptake of constituents associated with the facility's effluent discharges and general surface runoff from the site. Target species included edible-size fish (tarpon, snapper), forage fish, and crabs. Constituents included pesticides, metals, PCBs, and PAHs. Results demonstrated no significant tissue accumulation of these constituents attributable to the facility.	Confidential Utility Client	\$40	2001
262, 255	JV	19. Aquatic Biological Sampling Program, Fox River, Wisconsin – Implemented an extensive fish and aquatic biota (snapping turtles, crayfish, and benthic invertebrates) sampling program to assess potential natural resource injuries and environmental and human health risks from sediment PCBs. The fish sampling activities included nine fish species in 15 locations throughout a 30-mile reach of the river and 25-mile stretch of Green Bay. BBL staff designed and provided oversight for side-scan sonar investigations, benthic invertebrate community surveys, and habitat and vegetation mapping.	Joseph Heimbuch, Fox River Group Coordinator 941-926-7929 <i>de maximus, inc.</i> 2975 Bee Bridge Road Suite C Sarasota, FL 34239	\$60	1998
033, 204	P	20. Mercury Tissue Residue Monitoring Program, Alabama – Implemented a mercury tissue residue monitoring program in areas adjacent to an active manufacturing facility. Target species included frogs and snakes. Data were used to identify areas where mercury uptake was occurring in terrestrial biota and to provide baseline information for subsequent evaluation of the effectiveness of site remediation at reducing mercury uptake.	Confidential Chemical Manufacturer Client	\$30	2001
028	P	21. Threatened and Endangered Species Surveys, Florida – Performed a systematic transect survey of gopher tortoise burrows at an industrial site. Gopher tortoise burrows were located, and this information was used to modify proposed development plans to minimize impacts on the tortoises. A plan was also prepared to relocate tortoises from areas that were planned for future development.	Confidential Development Client	\$20	1997

028	P	22. Terrestrial Habitat Characterization and Wetlands Mitigation, New York – Conducted a wetlands assessment and prepared a wetlands restoration plan for a former manufactured gas plant (MGP) site. The project involved designing the restoration of emergent, scrub-shrub, and forested wetlands that would be affected by site remediation. The restoration plan identified replacement soils and appropriate seed mixes, shrubs, and trees. A monitoring plan was developed to document progress of the restored wetlands and to implement adaptive management techniques to ensure wetlands progress toward established success criteria. In addition, to address landowner concerns related to mature trees that might be affected by site remediation, BBL inventoried and evaluated these trees and developed property-specific programs to replace trees and/or compensate landowners.	Confidential Utility Client	\$25	2002
258	P	23. Wetlands Assessment and Mitigation Plan, New York – Designed and implemented a wetlands mitigation plan to compensate for wetlands and tributary impacts resulting from site remediation. The work included wetlands delineation and permitting, as well as preparing a wetlands restoration plan. Restoration activities included replacing excavated soils to original grades and planting native wetlands vegetation. Mitigation for the lost ponded wetlands involved creating scrub-shrub and herbaceous emergent wetlands at a 1:1 mitigation ratio of impacted acreage to created acreage. To maximize efficiency, the design used upland areas adjacent to existing wetlands to create one contiguous wetlands of varying wetlands types.	James Morgan 315-428-3101 Niagara Mohawk Power Corp. 300 Erie Blvd. West Syracuse, NY 13202	\$20	1998
028, 262	P	24. Sediment Quality Triad Study, Illinois – Performing a sediment quality triad study to assess potential ecological impacts associated with an industrial facility adjacent to a major river in Illinois. The triad methodology involves collection and evaluation of data concerning sediment chemical constituents, benthic community structure, and sediment toxicity. The various data are being evaluated to provide an overall assessment of sediment quality to determine the extent of impact. Triad data are being used to identify sediment areas for potential remediation and to develop preliminary cleanup objectives.	Confidential Manufacturer Client	\$40	2003
033	P	25. Annual Fish Monitoring Program, Southeastern River – Designed and implemented a resident fish tissue residue monitoring program in a 60-mile stretch of river to assess potential human exposure to PCBs via fish consumption. About 100 fillet samples representing five different taxonomic/ecological categories of fish are collected annually from various locations using electrofishing equipment, gill nets, and trap nets. Data are used to monitor temporal trends in fish PCB levels and to assess the appropriateness of existing fish consumption advisories.	Confidential Chemical Manufacturer Client	\$500	Ongoing
033	P	26. Aquatic Ecological Monitoring Program, New York – As part of a remedial investigation, obtained tissue residue samples from a variety of aquatic species in surface water drainage pathways associated with a former landfill Superfund site. Species included forage fish (minnows, juvenile sunfish), sport fish (bass, brook trout) and macroinvertebrates (crayfish). Sampling locations included headwater streams, larger streams, ponds, and impoundments. Biota were captured using nets, traps, and electrofishing. Data from this study were used to identify areas affected by landfill constituents, and to target those areas for further investigation and/or remediation.	Confidential Manufacturer Client	\$50	1993

033, 042, 073, 097, 262	P	27. Aberdeen Proving Ground (APG) Investigation, Maryland – Conducted pre-feasibility study evaluations to assess the potential remediation of select waterside APG locations using dredged material from the Port of Baltimore. The work involved consideration of environmental, geotechnical, coastal, and dredging aspects.	Wayne Young 410-974-7261 Maryland Environmental Service 2011 Commerce Park Drive Annapolis, MD 21401	\$125 (contract being executed)	2002
028, 033, 037, 092, 114	P	28. Biological Characterization and Modeling Assessment, New York – Developed and performed an environmental study to model potential accumulation of chemicals through the food web and potential effects on biological resources of a lake and other surface waters. Developed a chemical dynamic-rate-constant (fugacity) model for a lake with PCB-containing sediments. Estimated flux across sediment/water and water/air interfaces. Developed estimates of surface water transport into and out of the lake. Used modeling to assess the effects of past and proposed upstream remedial activities. The project included dietary studies and analysis of fish stomach contents and the collection and analysis of fish and invertebrates.	Confidential Chemical Manufacture Client	\$100	1997
033, 114, 258	P	29. Wetlands Mitigation, New York – Conducted a wetlands assessment and prepared a wetlands restoration plan for an 80-acre former MGP site. Developed a wetlands monitoring plan and implemented adaptive management techniques to provide for wetlands progress toward established success criteria.	Confidential Utility Client	\$20	2002
258, 028	P	30. Ecological Investigation at a CERCLA Site, USEPA Region 4 – Performed an ecological investigation as part of RI/FS activities at a former pesticide facility CERCLA site. Upland and wetlands ecological communities were classified based on vegetative species assemblages and structure. A wetlands functional assessment was performed using the USACE WET to identify principal wetlands functions and values. The results were used to develop a conceptual site model and focus the subsequent ecological risk assessment on specific ecological receptor species and communities.	Confidential Petroleum Manufacturer Client	\$20	2002

12. The foregoing is a statement of facts.

Signature: 	Typed Name and Title: Timothy J. Iannuzzi, Principal Ecologist	Date: 2/05/03
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**Experience Profile Code Numbers
for Use with Questions 10 and 11**

- | | | |
|---|--|---|
| 001 Acoustics; Noise Abatement | 041 Graphic Design | 084 Prisons & Correctional Facilities |
| 002 Aerial Photogrammetry | 042 Harbors; Jetties; Piers, Ship Terminal Facilities | 085 Product; Machine & Equipment Design |
| 003 Agricultural Development; Grain Storage; Farm Mechanization | 043 Heating; Ventilating; Air Conditioning | 086 Radar; Sonar; Radio & Radar Telescopes |
| 004 Air Pollution Control | 044 Health Systems Planning | 087 Railroad; Rapid Transit |
| 005 Airports; Nav aids; Airport Lighting; Aircraft Fueling | 045 Highrise; Air-Rights-Type Buildings | 088 Recreation Facilities (<i>Parks; Marinas; Etc.</i>) |
| 006 Airports; Terminals & Hangars; Freight Handling | 046 Highways; Streets; Airfield Paving; Parking Lots | 089 Rehabilitation (<i>Buildings; Structures; Facilities</i>) |
| 007 Arctic Facilities | 047 Historical Preservation | 090 Resource Recovery; Recycling |
| 008 Auditoriums & Theaters | 048 Hospital & Medical Facilities | 091 Radio Frequency Systems & Shieldings |
| 009 Automation; Controls; Instrumentation | 049 Hotels; Models | 092 Rivers; Canals; Waterways; Flood Control |
| 010 Barracks; Dormitories | 050 Housing (<i>Residential, Multi-Family; Apartments; Condominiums</i>) | 093 Safety Engineering; Accident Studies; OSHA Studies |
| 011 Bridges | 051 Hydraulics & Pneumatics | 094 Security Systems; Intruder & Smoke Detection |
| 012 Cemeteries (<i>Planning & Relocation</i>) | 052 Industrial Buildings; Manufacturing Plants | 095 Seismic Designs & Studies |
| 013 Chemical Processing & Storage | 053 Industrial Processes; Quality Control | 096 Sewage Collection; Treatment & Disposal |
| 014 Churches; Chapels | 054 Industrial Waste Treatment | 097 Soils & Geologic Studies; Foundations |
| 015 Codes; Standards; Ordinances | 055 Interior Design; Space Planning | 098 Solar Energy Utilization |
| 016 Cold Storage; Refrigeration; Fast Freeze | 056 Irrigation; Drainage | 099 Solid Wastes; Incineration; Landfill |
| 017 Commercial Building (<i>Low Rise</i>); Shopping Centers | 057 Judicial and Courtroom Facilities | 100 Special Environments; Clean Rooms; Etc. |
| 018 Communications Systems; TV; Microwave | 058 Laboratories; Medical Research Facilities | 101 Structural Design; Special Structures |
| 019 Computer Facilities; Computer Service | 059 Landscape Architecture | 102 Surveying; Platting; Mapping; Flood Plain Studies |
| 020 Conservation and Resource Management | 060 Libraries; Museums; Galleries | 103 Swimming Pools |
| 021 Construction Management | 061 Lighting (<i>Interiors; Display; Theater; Etc.</i>) | 104 Stormwater Handling & Facilities |
| 022 Corrosion Control; Cathodic Protection; Electrolysis | 062 Lighting (<i>Exteriors; Streets; Memorials; Athletic Fields; Etc.</i>) | 105 Telephone Systems (Rural; Mobile; Intercom; Etc.) |
| 023 Cost Estimating | 063 Materials Handling Systems; Conveyors; Sorters | 106 Testing & Inspection Services |
| 024 Dams (<i>Concrete; Arch</i>) | 064 Metallurgy | 107 Traffic & Transportation Engineering |
| 025 Dams (<i>Earth; Rock</i>); Dikes; Levees | 065 Microclimatology; Tropical Engineering | 108 Towers (Self-Supporting & Guyed Systems) |
| 026 Desalinization (<i>Process & Facilities</i>) | 066 Military Design Standards | 109 Tunnels & Subways |
| 027 Dining Halls; Clubs; Restaurants | 067 Mining & Mineralogy | 110 Urban Renewals; Community Development |
| 028 Ecological & Archeological Investigations | 068 Missile Facilities (<i>Silos; Fuels; Transport</i>) | 111 Utilities (Gas & Steam) |
| 029 Educational Facilities; Classrooms | 069 Modular Systems Design; Pre-Fabricated Structures or Components | 112 Value Analysis; Life-Cycle Costing |
| 030 Electronics | 070 Naval Architecture; Off-Shore Platforms | 113 Warehouses & Depots |
| 031 Elevators; Escalators; People-Movers | 071 Nuclear Facilities; Nuclear Shielding | 114 Water Resources; Hydrology; Groundwater |
| 032 Energy Conservation; New Energy Sources | 072 Office Buildings; Industrial Parks | 115 Water Supply; Treatment; and Distribution |
| 033 Environmental Impact Studies, Assessments, or Statements | 073 Oceanographic Engineering | 116 Wind Tunnels; Research/Testing Facilities Design |
| 034 Fallout Shelters; Blast-Resistant Design | 074 Ordnance; Munitions; Special Weapons | 117 Zoning; Land Use Studies |
| 035 Field Houses; Gyms; Stadiums | 075 Petroleum Exploration; Refining | |
| 036 Fire Protection | 076 Petroleum and Fuel (<i>Storage and Distribution</i>) | |
| 037 Fisheries; Fish Ladders | 077 Pipelines (<i>Cross-County - Liquid & Gas</i>) | |
| 038 Forestry & Forest Products | 078 Planning (<i>Community; Regional; Area-Wide; and State</i>) | |
| 039 Garages; Vehicle Maintenance Facilities; Parking Decks | 079 Planning (<i>Site; Installation; and Project</i>) | |
| 040 Gas Systems (Propane; Natural; Etc.) | 080 Plumbing & Piping Design | |
| | 081 Pneumatic Structures; Air-Support Buildings | |
| | 082 Postal Facilities | |
| | 083 Power Generation; Transmission; Distribution | |

**Supplemental Experience Profile Code
Numbers for Use with Questions 10 and 11**

Code Description

200 Air Traffic Control Planning
 202 Airborne Sensing Radiation/Magnetics
 203 Animal Shelters
 204 Animal Testing
 205 Appraisals, Rate Studies
 262 Aquatic Biology
 206 Architectural Consultation/Surveys
 281 Asbestos Abatement
 207 Audio-Visual Aids, Brochures, Charts
 208 Bio-Medical Engineering
 272 CAD (Computer-Aided Design)
 273 CADD (Computer-Aided Design & Drafting)
 271 Child Care Centers
 209 Civic Buildings, Community Centers
 210 Climatological Studies
 211 Coastal Engineering/Studies
 212 Color Separation
 213 Contract Administration/Claims Analysis
 269 Design-Build
 261 Design for Handicapped Accessibility
 214 Diving Surveys - Construction
 215 Dredging
 216 Dredging Surveys
 217 Drilling and Completion of Wells
 218 Economic Impact & Feasibility Studies
 277 Electric Magnetic Fields
 219 Electrical Design/Studies
 220 Engineering Consultations and Reports
 276 Environmental Protection
 282 Environmental Services & Engineering
 221 Environmental Testing and Analysis
 222 Equipment Rental
 223 Ferry Terminals and Transfer Bridges
 224 Finance
 270 Financial Establishments (Banks)
 283 Geographic Information Systems (GIS)
 225 Geophysical Service
 278 Global Positioning Systems (GPS)
 280 Graphic Art
 266 Hazardous Waste Management
 226 Historic Monuments & Memorials

Code Description

275 Indefinite Delivery Contracts
 227 Industrial Design
 267 Infrared Surveys
 229 Investigation of Failures
 230 Lake Habilitation and Management
 231 Land Subdivision and Development
 232 Laser Systems Development
 233 Lashings and Securing Systems
 234 Legal
 235 Management
 236 Marine Biology
 237 Market Analysis/Research
 238 Mathematical Modeling
 259 Microbiological Analysis
 239 Military Facilities, Armory
 201 Military Terrain Analysis
 240 Mine Drainage
 241 Mobile Home Development
 242 Model Construction
 243 Municipal Engineering
 244 Observatory
 245 Photogrammetry
 246 Planetarium
 268 Plant Operation
 247 Powerhouse Building Design
 248 Prestressed Concrete
 249 Procurement
 264 Project & Public Security Planning & Design
 250 Public Relations
 279 Remote Sensing
 251 Research and Development
 265 Roofing Consultant Services
 252 Socio-Economic Studies
 253 Technology Assessment
 254 Technology Transfer
 255 Toxicology & Hazardous Materials
 256 Training
 274 Underground Storage Tanks
 257 Value Engineering
 260 Weather Forecasting
 258 Wetlands

***Revised Project Descriptions for
Standard Form 255***

Blasland, Bouck & Lee, Inc.

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

8. WORK BY FIRM OR JOINT VENTURE WHICH BEST ILLUSTRATES CURRENT QUALIFICATIONS RELEVANT TO THIS PROJECT.				E. ESTIMATED COST (IN 1,000s)	
A. PROJECT NAME AND LOCATION	B. NATURE OF FIRM'S RESPONSIBILITY	C. OWNER'S NAME AND ADDRESS	D. COMPLETION DATE (ACTUAL OR ESTIMATED)	ENTIRE PROJECT	WORK FOR WHICH FIRM WAS/IS RESPONSIBLE
(1) CERCLA Remedial Investigation, Estuarine Portion of the Passaic River, New Jersey	See below	David Rabbe, President 732-246-5848 Tierra Solutions, Inc. Two Tower Center Blvd., 10 th Floor East Brunswick, NJ 08816	2005	\$25,000	\$5,000

BBL is serving as the primary remedial investigation/feasibility study (RI/FS) contractor for the Passaic River Study Area (PRSA). As part of this project, BBL is also providing high-level ecological assessment services for the project. The PRSA is 6 miles in length and drains a 935-square-mile watershed encompassing 117 municipalities in northeastern New Jersey. Land use in the area is dominated by high-density commercial and industrial/commercial development. Throughout the area, there exists a highly developed network of highways, combined sewer overflows (CSOs), stormwater outfalls, and publicly owned treatment works (POTWs). The historical expansion of industry and population surrounding the area has resulted in degraded sediment, water quality (i.e., water is rated very poor), and natural habitat. The river's sediment contains a wide variety of chemical contaminants, including (but not limited to) a variety of metals, pesticides, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), and dioxins/furans. BBL's role as the RI/FS and Ecological Risk contractor encompasses the following activities:



- Performing habitat and ecological community surveys to quantify and characterize the habitat and fish, birds, and other organisms in the area; these surveys include terrestrial, wetland, and aquatic habitat characterizations, a fish community survey, and an avian community survey;
- Conducting an ecological risk assessment to calculate ranges of risk-based remediation goals; this effort includes evaluating the relationships between sediment and biological chemistry, along with benthic invertebrate mortality and community structure;
- Evaluating potential ecological and human use restoration options for the river as part of an urban river restoration initiative being contemplated by the USACE, USEPA, and NOAA;
- Publication of a book entitled *A Common Tragedy: History of an Urban River*, which characterizes the ecological and economic history of the river;
- Evaluating CSO discharges into the river to determine the types and concentrations of chemicals that are discharged to the study area from ongoing pollution sources;
- Developing an in-depth remedial investigation report enveloping a significant amount of sediment and biological data obtained since 1995; BBL has implemented a GIS system to facilitate the evaluation of these data; and
- Developing a feasibility study report (consistent with CERCLA) that will evaluate the full realm of remedial alternatives potentially applicable to the site.

BBL has also developed a number of site-specific monitoring programs within the Passaic River and Newark Bay Estuary. These intensive programs have focused on various sediment removal activities.

8. WORK BY FIRM OR JOINT VENTURE WHICH BEST ILLUSTRATES CURRENT QUALIFICATIONS RELEVANT TO THIS PROJECT.				E. ESTIMATED COST (IN 1,000s)	
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(2) Fox River Group NRDA and Remedial Investigation/Feasibility Study	See below	Joseph Heimbuch, Fox River Group Coordinator 941-926-7929 <i>de maximus, Inc.</i> 2975 Bee Bridge Road, Suite C Sarasota, FL 34239	2003	\$10,000	\$3,000

On behalf of the Fox River Group (FRG), BBL has provided technical support to defend against a natural resource damage assessment (NRDA) initiative related to the presence of PCBs in the river system. As part of this initiative BBL staff designed and implemented a large-scale field sampling program to collect ecological, hydrographical, and physicochemical data. Extensive river and shoreline characterization was performed, including GIS-based habitat mapping, side-scan sonar mapping of the river bottom, fisheries and benthic community surveys, wildlife surveys, and sediment and water quality sampling. These data were used to support the developments of technical reports and ecological/human health risk assessments.



Working cooperatively with other consultants, BBL conceptualized and evaluated approximately 50 natural resource restoration, preservation, and use enhancement projects as part of a settlement package. We then managed the design and construction for new and upgraded waterfront recreational facilities at the 1,000 Islands Environmental Center, including:

- waterfront trail that was upgraded to a low-maintenance, wheelchair accessible trail;
- new combination fishing pier and canoe launch, also wheelchair accessible;
- new observation deck for outdoor education and viewing of river habitat and waterfowl;
- upgraded access point with new parking lot and vehicle turn-around;
- new visitor sign-in and information station; and
- new interpretive signs to support the new facilities.

BBL personnel also conducted and reported sensitivity analyses of the state's PCB fate and transport model of the Fox River below DePere Dam. The analyses identified significant problems in sediment transport modeling—a problem to be corrected by work under the Memorandum of Understanding (MOU). BBL also provided critical review of the RI/FS documents, including human health and ecological risk assessments.

Using in-house talent and state-of-the-art electronic techniques, BBL developed and delivered presentations regarding technical issues and the projects proposed for settlement purposes.

8. WORK BY FIRM OR JOINT VENTURE WHICH BEST ILLUSTRATES CURRENT QUALIFICATIONS RELEVANT TO THIS PROJECT.				E. ESTIMATED COST (IN 1,000s)	
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(3) Wetlands and Terrestrial Ecology Investigation, New York	See below	Confidential Metals Manufacturer	1995	\$100	\$100

BBL performed extensive surveys of fish, terrestrial vertebrates, macroinvertebrates, and wetland plant communities as part of an ecological investigation at a CERCLA site. Fish were collected using electrofishing and netting techniques. Quantitative methods were employed to determine fish community structure and species abundance. Selected sport fish and forage fish samples were also retained for chemical analysis.

Terrestrial mammals were sampled using various trapping methods. Population sizes were estimated and compared among various areas of the site to determine if there were any contaminant-related impacts. Selected mammal and macroinvertebrate samples were also retained for tissue residue analysis and comparison to water quality, soil, and sediment chemical data.

The assessment of vegetative communities at the site included wetland delineation and an evaluation of wetland function and value in accordance with the USACE Wetlands Delineation Manual and Wetland Evaluation Technique (WET). Wetland functional value was compared to reference locations, and no contaminant-related effects were found.

Sediment samples were also obtained from various drainage pathways and submitted for laboratory toxicity and bioaccumulation testing. Sediment assays involved *Hyaella*, *Chironomus*, and *Lumbriculus* acute and chronic tests. Tests were used to identify thresholds of toxicity and determine the need for sediment remediation.

The study results successfully documented the lack of impact on aquatic communities and vegetative communities, and a limited impact to terrestrial small mammals and the sediment-associated food web at the site. Based on these results, a small area of sediments was remediated. Collectively, the ecological studies reduced the size of the potential remediation area from 150 to 8 acres.



8. WORK BY FIRM OR JOINT VENTURE WHICH BEST ILLUSTRATES CURRENT QUALIFICATIONS RELEVANT TO THIS PROJECT.				E. ESTIMATED COST (IN 1,000s)	
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(4) Ecological Assessment, Puerto Rico	See below	Confidential Utility	2001	\$60	\$60

BBL designed and implemented an ecological assessment in association with RI/FS activities at a 100-acre site. Activities included habitat quality assessments, receptor species identification, aquatic biota tissue residue sampling, and wetland delineation. The site included active manufacturing areas, saltwater habitats, subtropical moist forest areas, and mangrove swamps.

Aquatic biota were sampled using various traps and netting techniques. Target species included sport fish, forage fish, and benthic invertebrates. Edible-size fish fillet samples and crab muscle samples were obtained to evaluate potential human exposure to sediment-associated contaminants. Forage fish and crab whole-body samples were used to evaluate potential food chain exposure of piscivorous wildlife.

Habitat quality was also evaluated throughout the site. Portions of the facility were developed and used for industrial purposes and thus had little wildlife habitat value. Other portions of the site were undeveloped and provided habitat for various species. The habitat quality assessment provided information that was used in conjunction with soil, sediment, and water quality data to identify media and locations for further consideration in a baseline ecological risk assessment.

Information obtained in these investigations was used to develop a conceptual site food web exposure model, including identification of potential ecological receptors and areas of interest for the subsequent ecological risk assessment.



8. WORK BY FIRM OR JOINT VENTURE WHICH BEST ILLUSTRATES CURRENT QUALIFICATIONS RELEVANT TO THIS PROJECT.				E. ESTIMATED COST (IN 1,000s)	
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(5) Habitat and Ecological Characterization, River Site, Northeastern United States	See below	Confidential Metals Manufacturer	2002	\$100	\$100

Since 1992, BBL has performed extensive aquatic biota sampling and habitat assessment related tasks in various parts of an 8.5-mile stretch of river in the northeastern United States. This work was done in support of RSI (Phase I and II), NTCRA, SRS, and RI/FS activities and included surveys of fish and benthic invertebrates, studies involving fish movement, caged fish, and caged mussels, and characterization of aquatic habitat.

Fish were sampled using electrofishing, trapping, and netting techniques. Over 100 adult sport fish (a top-down pelagic predator and a bottom feeder) are collected yearly for human health risk assessment to analyze temporal and spatial trends in contaminant tissue residue concentrations in edible filets. A similar number of forage fish are collected yearly and analyzed as whole-body composite samples for ecological risk evaluations. Over a two year period, approximately 1,500 fish were marked using a site-specific fin-clip to track fish movement during a mark-and-recapture program. Fish movement was analyzed to better understand fish habitat use and to refine spatial and temporal trends in tissue concentrations.

Benthic invertebrates were sampled in multiple programs using grab samplers (a standard 6"x6" Ekman and 9"x9" Ponar) and artificial substrate samplers (Hester-Dendy multiplate). Over 160 benthic samples were collected to date to examine the potential effects of sediment dredging and sediment capping to the benthic community. Data were analyzed using family and species level taxonomy in a multimetric approach to assess possible spatial and temporal related trends in benthic abundance, diversity, composition, and tolerance.

Caged fish and mussel studies were conducted in the river to examine short-term uptake of water column contaminants associated with the sediment dredging project. Habitat surveys included characterizing epifaunal substrate and available in-stream cover, as well as bank vegetation and stability and cover-type composition of the riparian zone. The study indicated that habitat quality and substrate characteristics affected the diversity, abundance, and distribution of aquatic biota in the river.



8. WORK BY FIRM OR JOINT VENTURE WHICH BEST ILLUSTRATES CURRENT QUALIFICATIONS RELEVANT TO THIS PROJECT.				E. ESTIMATED COST (IN 1,000s)	
A. PROJECT NAME AND LOCATION	B. NATURE OF FIRM'S RESPONSIBILITY	C. OWNER'S NAME AND ADDRESS	D. COMPLETION DATE (ACTUAL OR ESTIMATED)	ENTIRE PROJECT	WORK FOR WHICH FIRM WAS/IS RESPONSIBLE
(6) Ecological Investigation at a CERCLA Site, USEPA Region 5	See below	Confidential Paper Manufacturer	1996	\$150	\$150

BBL conducted extensive ecological investigations in support of RI activities at a large CERCLA Site in USEPA Region 5. Ecological investigations included fish and terrestrial vertebrate and invertebrate sampling, turtle sampling, caged fish studies, fish movement, diet, and aging studies, and wetland plant identification and delineation. In addition, RI activities included investigation of contaminated sediments and soils, as well as an analysis of chemical fate and transport. In total, the RI encompassed three separate active industrial facilities, former industrial sites, four landfill disposal areas, waste treatment lagoons, and a 75-mile portion of river. The site also included approximately 1,000 acres of wetland soils from former impoundments.

Fish were sampled from multiple riverine and lacustrine locations, including reference locations, using electrofishing, trapping, and netting techniques. Fish were collected for human health and ecological risk assessment purposes. Stomach content analyses were performed on a subset of piscivorous, omnivorous, and planktivorous fish species to determine diet composition and to identify possible food chain pathways of exposure to contaminants. Fish movement was analyzed to better understand fish habitat use and to define spatial and temporal trends in tissue concentrations. Fish were aged using body parts (scales, spines, or otoliths) to examine relationships between age and tissue contaminant concentrations.

Terrestrial sampling included field mice and earthworm collections as part of the ecological risk assessment. Mice were collected using a combination of live traps and snap traps. Earthworms were collected by hand. Results were used to assist in the development of site-related sediment bioaccumulation factors (BAFs).

Snapping turtles were collected using baited live traps and processed as edible tissue samples for human health purposes. In situ caged fish studies were used in the ecological assessment to examine short-term uptake of contaminants in forage fish from the water column. Lastly, wetland plant communities were delineated so that mitigation alternatives could be considered.



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(7) Young-of-year Fish Monitoring Program, Massachusetts	See below	Confidential Manufacturer	2002	\$150	\$150

BBL investigated sediments, water column, biota, floodplain soils, and siltation rates in portions of up to 60 miles of river as part of a RI/FS, remedial facility investigation (RFI), and Remedial Design/Remedial Action (RD/RA) program. Historically, the river received discharges from local facilities that added PCBs, metals, and low-level concentrations of VOCs, SVOCs, PCDDs/PCDFs to the sediments. Biota investigations in the river have been conducted since 1990 for the purposes of human health and ecological risk assessment and have included fish sampling surveys, fish aging analysis, caged fish and mussel studies, invertebrate sampling, and a habitat assessment.

Fish were sampled from impounded and free-flowing portions of the river using electrofishing and netting techniques. Adult fish were analyzed as individual fillets for human health assessment purposes. Young-of-year (YOY) fish were analyzed as whole-body composite samples to aid in ecological risk assessment and to provide an indicator of contaminant bioavailability. A subset of fish were aged using scales to examine the relation between age and contaminant concentrations.

Caged fish and mussel studies were conducted in the river to estimate short-term uptake of water column contaminants. Caged fish were used to evaluate ecological risk. Caged mussels were used to examine the effects of pre-, during-, and post-remediation activities. A baseline in-river habitat assessment was conducted prior to remediation to help develop project restoration goals. Benthic invertebrates were collected using kick-net sampling.



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(8) Sharps Island Restoration, Maryland	See below	Wayne Young 410-974-7261 Maryland Environmental Service 2011 Commerce Park Drive Annapolis, MD 21401	2002	\$68	\$68

The historical Sharps Island footprint is under consideration for possible creation of a wetland and upland island habitat. The original island completely disappeared in the early 1960s, possibly due to a variety of physical and environmental factors. Sharps Island is located approximately 4 miles south of Tilghman Island (Talbot County) and 4 miles west of Cook Point (Dorchester County) at the mouth of the Choptank River.

BBL performed an Environmental Conditions Reconnaissance of Sharps Island. This effort included a literature search and review of existing resource information and potential impacts due to island construction. Through research and consultation with commercial fisherman and sport fishing associations, the extent and locations of fishing, boating, and seasons of use were evaluated. Essential Fisheries Habitat (EFH) and Habitat Area of Particular Concern (HAPC) at the site were also assessed. Parameters of concern that were assessed include:

- Water and sediment quality;
- Habitats and wildlife;
- Fisheries and benthic communities;
- Recreational community;
- Rare, threatened, and endangered species (RTE); and
- Historical/cultural resources and critical areas.

Also, BBL performed a dredging engineering study. BBL's role was to provide an engineering assessment of the feasibility of constructing a dredged material containment facility. Specifically, BBL's tasks (in relation to dredging) were:

- Review the existing geotechnical information;
- Examine five potential dike alignments;
- Review the coastal engineering design; and
- Prepare estimates of neat quantities of material that would be used for the island construction.

A cost estimate was made to determine the costs associated with dredging material from the Baltimore Harbor approach channels and transporting to and placing at the proposed facility.



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(9) Lake Okeechobee Sediment Management Services, Florida	See below	Jorge Patino 561-682-2731 South Florida Water Management District 3301 Gun Club Road West Palm Beach, FL 33416	2003	\$955	\$955

BBL has provided sediment management support services related to organics and inorganics in 730 square miles of Lake Okeechobee since January 2000. Our work has included the following:

- Development of goals and performance measures for the project;
- Public and interagency outreach plans;
- Evaluation of physical and chemical sediment data in Lake Okeechobee and feeding tributaries;
- Feasibility study to evaluate all possible sediment management options, including, but not limited to, dredging, in-situ capping, and chemical treatment;
- Feasibility study to evaluate beneficial reuse of both treated waters and remaining solids, including, but not limited to, agricultural soil blending, pelletized fertilizer, and glass or concrete block;
- Sediment fate and transport modeling;
- Conducting interagency and public outreach meetings;
- Website updates and reports to the governing board;
- Coordination with USACE, FWC, and USFWS; and
- Public and interagency outreach.



The condition of Lake Okeechobee is a critical factor in the efforts to restore the world-renowned Everglades and maintain an adequate water supply for South Florida's people, industry, and agriculture. The lake typically contains more than one trillion gallons of water and serves as the headwaters to the Everglades as well as the Caloosahatchee River and several canals. Over the past century, water quality in Lake Okeechobee has changed dramatically, largely as a result of increased population and farming stresses in the lake basin. The increased intensity of human settlements and agricultural activities led to substantial increases in the level of nutrients – in particular, phosphorus – entering the lake through its tributaries and in storm water runoff.

The primary purpose of the study is to analyze all of the possible options for reducing internal phosphorus loading in the lake. BBL analyzed 35 different sediment management technologies to identify the ones that could be used as building blocks to put together a range of potentially feasible and effective sediment management alternatives. After a detailed technical assessment, the team developed seven alternatives that, if implemented, could possibly meet the five goals of the program.

Potential effects of any given alternative will be evaluated in terms of impacts/benefits to submerged aquatic vegetation, wetland vegetation in the littoral zone, fish, aquatic invertebrates, manatees, alligators, snail kites, and wading birds.

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(10) Ecological Investigation, Alabama	See below	Confidential Chemical Manufacturer	2003	\$500	\$500

For a RI/FS process, BBL conducted habitat and ecological investigations for a riverine floodplain in Alabama. During the Fall of 2001 and the Spring of 2002, a series of floodplain transects were established along a 39-mile reach of a large freshwater creek in the Southeastern United States. Transects (n= 12) of the 100-year floodplain were set perpendicular to the creek to aid in the surveys of vegetation and wildlife during the two seasons. The purpose of the surveys was to: 1) compile information in a searchable database; and 2) use information to support exposure assumptions in a quantitative ecological risk assessment.

Vegetation surveys focused on the predominant species and abundance of groundcover, understory, and canopy vegetation types. A series of aerial photographs were brought into the field, and detailed notes on the habitats provided by the various species of vegetation and cover were recorded in a field logbook. These notes were used to document changes in habitat type along each transect and to verify the "fingerprint" of each habitat type for purposes of delineating floodplain habitats throughout the 39-mile reach of the creek. Wildlife species that were identified by sight, call, or sign (e.g., scat, daybeds, slides, dens, paths, etc.) were also noted in the habitats where found.



In addition to the floodplain habitat and wildlife assessment, both shorelines of the creek were videotaped along the 39-mile reach for purposes of identifying key habitats and wildlife use of the creek. As part of the shoreline assessment, sandbars were visually examined to document tracks of wildlife that forage along the creek. This information was added to the database and will be used to support the selection of ecological receptors for the risk assessment.

Standard Form 254

Normandeau Associates, Inc.

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

STANDARD FORM (SF)

254

Architect-Engineer and Related Services Questionnaire

1. Firm Name/Business Address:

Normandeau Associates
25 Nashua Road
Bedford, NH 03110-5500

ACASS number 001537

1a. Submittal is for **Parent Company** **Branch or Subsidiary Office**

2. Year Present Firm Established
1970

3. Date Prepared:
8/28/02

4. Specify type of ownership & check below, if applicable.
Corporation

- A. Small Business when NAICS code is 541710 <500**
 B. Small Disadvantaged Business
 C. Woman-Owned Business

5. Name of Parent Company, if any:

5a. Former Parent Company Name(s), if any, and Year(s) Established:
Thermo TerraTech, Inc./Thermo Electron Corp. 1956

6. Names of not more than Two Principals to Contact: Title/Telephone

- 1) Peter C. Kinner / Senior Vice President / 603-472-5191
2) Paul L. Harmon / Vice President / 610-948-4700

7. Present Offices: City / State / Telephone / No. Personnel Each Office

Normandeau Associates / Norfolk / CT / 860-542-0111 / 1
Normandeau Associates / Lewes / DE / 302-945-3567 / 2
Normandeau Associates / Yarmouth / ME / 207-846-3598 / 7
Normandeau Associates / Plymouth / MA / 508-830-9400 / 2
Normandeau Associates / Bedford / NH / 603-472-5191 / 53
Normandeau Associates / Hampton / NH / 603-926-7661 / 6
Normandeau Associates / Westmoreland / NH / 603-355-2333 / 7

7a. Total Personnel 131

Normandeau Associates / Peekskill / NY / 914-736-0295 / 10
Normandeau Associates / Spring City / PA / 610-948-4700 / 21
Normandeau Associates / Drumore / PA / 717-548-2121 / 18
Normandeau Associates / Aiken / SC / 803-644-6262 / 2
Normandeau Associates / Albion / WA / 506-664-8065 / 2

8. Personnel by Discipline: (list each person only once, by primary function.)

<u>9</u> Administration	<u>27</u> Fishery Biologist	<u>6</u> Water Resources Expert	<u>0</u> Unnamed Discipline 6
<u>17</u> Aquatic/Marine Biologist	<u>2</u> Geographic Information Specialist	<u>6</u> Wetlands Scientist	<u>0</u> Unnamed Discipline 7
<u>1</u> CAD/CADD Expert	<u>3</u> Geologist/Hydrologist	<u>3</u> Wildlife Biologist	<u>0</u> Unnamed Discipline 8
<u>2</u> Civil Engineer	<u>2</u> Instrument Technician	<u>0</u> Unnamed Discipline 1	<u>0</u> Unnamed Discipline 9
<u>5</u> Data Processing Expert	<u>1</u> Landscape Architect	<u>0</u> Unnamed Discipline 2	<u>0</u> Unnamed Discipline 10
<u>4</u> Ecologist	<u>1</u> Quality Assurance Auditor	<u>0</u> Unnamed Discipline 3	<u>0</u> Unnamed Discipline 11
<u>3</u> Environmental Scientist	<u>2</u> Soil Scientist	<u>0</u> Unnamed Discipline 4	<u>0</u> Unnamed Discipline 12
<u>26</u> Environmental Technician	<u>11</u> Technical Support	<u>0</u> Unnamed Discipline 5	<u>0</u> Unnamed Discipline 13

9. Summary of Professional Services Fees

Received: (Insert index number)

Last 5 Years (most recent year first)

	2001	2000	1999	1998	1997
Direct Federal contract work, including overseas	<u>5</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
All other domestic work	<u>8</u>	<u>8</u>	<u>8</u>	<u>8</u>	<u>8</u>
All other foreign work*	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>

* Firms interested in foreign work, but without such experience, check here:

Ranges of Professional Services Fees

- INDEX**
1. Less than \$100,000
2. \$100,000 to \$250,000
3. \$250,000 to \$500,000
4. \$500,000 to \$1 million
5. \$1 million to \$2 million
6. \$2 million to \$5 million
7. \$5 million to \$10 million
8. \$10 million or greater

10. Profile of Firm's project Experience, Word Last 5 Years

Profile Code	Number of Projects	Total Gross Fees (In thousands)	Profile Code	Number of Projects	Total Gross Fees (In thousands)	Profile Code	Number of Projects	Total Gross Fees (In thousands)
1) 004	145	404	11) 088	7	32	21) 221	253	352
2) 020	40	220	12) 092	29	86	22) 234	1	13
3) 028	1,399	17,592	13) 097	7	20	23) 236	27	1,042
4) 032	1	1	14) 099	3	23	24) 240	6	23
5) 033	519	9,452	15) 102	3	115	25) 255	353	1,054
6) 037	850	19,001	16) 104	7	41	26) 258	677	4,172
7) 042	2	35	17) 114	339	4,180	27) 262	277	2,091
8) 071	12	265	18) 115	3	3	28) 266	354	1,942
9) 077	1	3	19) 216	116	377	29) 282	14	16
10) 079	7	19	20) 218	1	25	30) 283	3	64

11. Project Examples, Last 5 Years

Profile Code	"P," "C," "JV," or "IE"	Project Name and Location	Owner Name & Address	Cost Of Work (in thousands)	Completion Date (Actual or Estimated)
020/028 037 088 208	P	1 Biological Studies in the Snake and Columbia River Basins	U. S. Army Corps of Engineers Walla Walla, WA	15,000 9,000	On-Going 2002
028	P	2 Seabrook Marine/Estuarine Ecological Study Seabrook Nuclear Station, NH	North Atlantic Energy Seabrook, NH	21,000	On-Going
009/020 028/033 221/037	P	3 Environmental Impact, Aquatic and Terrestrial Ecologic Studies; Limerick Generating Station, Delaware and Schuylkill Rivers, Pennsylvania	PECO Energy Company Philadelphia, PA	2610	On-Going
033	P	4 Merrimack River Watershed Assessment Study for the U.S. Army Corps of Engineers, New England District	Camp Dresser & McKee, Inc. Cambridge, MA	10,000	On-Going
020/028 037 088 208	P	5 Environmental Impact Assessment for Tennessee Valley Authority Reservoir Operations System	PB Power Boston, MA	775	On-Going
028 037	P	6 Postconstruction Ecological Studies: Fisheries, Benthos, Water Quality, Merrill Creek Reservoir, Delaware River, NJ	Merrill Creek Owner's Group Washington, NJ	191	On-Going
033	P	7 Preparation of Supplemental Environmental Report for Application to Renew NRC Nuclear Plant Operating License for Peach Bottom Atomic Power Station	Exelon Corporation Kennett Square, PA	15	On-Going

028 033	P	8 Characterization of Water Quality and Aquatic Biology in Support of FERC Relicensing for Two Hydropower Projects on the Columbia River; Grant County Public Utility District, Ephrata, WA	Grant County Public Utility District Ephrata, WA	236	2000
028 033 079	P	9 Kin-Buc Landfill - Brunswick, NJ; Fisheries; Water Quality; Benthos; Sediment Bioassays	Chemical Waste Management of New Jersey, Inc. Newark, NJ	100	1999
028 221	C	10 Remediation Sampling and Testing of Sediment	Port Arthur Remediation Team - CH2M Hill Port Arthur, TX	1,420	2002
028 221	C	11 Water Quality Monitoring for the Boston Harbor Dredging Project	U.S. Army Corps of Engineers, New England Division Concord, MA	140	2000
028 283	C	12 Hydraulic Assessments of 80-Miles of Upper Ohio River Using Side-Scan Sonar/Geographic Information System	U.S. Army Corps of Engineers Pittsburgh, PA	202	1998
037	P	13 Fisheries, American Shad Restoration, Trap and Transport, Radiotelemetry, Susquehanna River, Schuylkill River	Susquehanna Electric Company PECO Energy Company Philadelphia, PA	1,721	On-Going
028 037	P	14 Population Study of Striped Bass, Hudson River	Entergy Nuclear Operations White Plains, NY	1,600	On-Going
028 283	P	15 Substrate Composition Characterization of the Belleville Pool, Ohio River Using Side-Scan Sonar/Geographic Information System	U.S. Army Corps of Engineers Huntington, WV	57	2001
114	P	16 Phase I & II Comprehensive Site Assessment New Neponset Valley Sewer; Dedham, MA	Massachusetts Water Resources Authority Boston, MA	479	1999
028 033	C	17 Characterization of Aquatic Habitat; development of Geographic Information System; Design of Field Studies to Inventory Physical Habitat	ORSANCO Cincinnati, OH	1,000	1998
028 033	C	18 Impact Assessment, Permitting and Mitigation and Endangered Species Studies Endangered Act Sec 7 Consultation	Bath Iron Works Bath, ME	375	On-Going
033 037	C	19 Fisheries and Water Quality Aspects of FERC Relicensing at Willamette Falls Hydroelectric Project	Portland General Electric Portland, OR	1,400	On-Going

028 033 114/258	P	20 Developing a Restoration Plan for the Upper Scarborough Marsh.	Maine Inland Fish and Wildlife Department Scarborough, ME	138	On-Going
033	C	21 EIS; Permits (CZM-CAFRA), Waterfront Devel. Permit, Coastal Wetlands Permit, Freshwater Wetlands Indiv. Permit; ACOE Indiv. Permit Designed 4-acre wetland mitigation site, Fischer Blvd., Ocean County.	Ocean County Freeholders Toms River, NJ	125	2001
033	P	22 Environmental Impact Statement for Dredging of Boston Harbor and Pier Sites, Permitting	Massport - Maritime Division Boston, MA	1,800	1998
037	P	23 NPDES Permit Compliance, 316(b) Water Intake Study; Fisheries Impact Assessment. Delaware City Refinery	Motiva Enterprise Delaware City, DE	300	2001
037	P	24 Fisheries Collections from Characterized Areas for Potential Dredge Disposal	MA Office of Coastal Zone Management Boston, MA	139	2000
033	C	25 Environmental Impact Statement for the Manchester Airport Access, New Hampshire	New Hampshire Department of Transportation Concord, NH	1,125	On-Going
028 033	C	26 Fisheries and Water Quality Issues in the Relicensing of the Santee Cooper Project.	South Carolina Public Service Authority Moncks Corner, SC	60	On-Going
020 028	C	27 Hubline Maine Pipeline Pipeline, Wetlands, Field Surveys, Threatened & Endangered Species	TRC Environmental Corporation Lowell, MA	750	On-Going
033	P	28 Evaluation of Peach Bottom Atomic Power Station Cooling Towers Operation on Fish Communities in Conowingo Pond, Susquehanna River	Exelon Corporation Kennett Square, PA	250	1999
033 258	C	29 Rte 101/51 Environmental Impact Studies and Mitigation	NH Department of Transportation Concord, NH	1,200	1998
033	C	30 Provide NEPA and other Environmental Expertise to Disaster Relief Teams	Emergency Response Program Management Consultants Arlington, VA	125	On-Going

12. The foregoing is a statement of facts

Date:

Signature:

Paul L. Harmon

Typed Name and Title: Paul L. Harmon/Vice President

2/10/03

Standard Form 254

Air, Water & Soil, Inc.

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Architect-Engineer and Related Services Questionnaire

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the FAR Secretariat (VRS), Office of Federal Acquisition and Regulatory Policy, GSA, Washington, D.C. 20405; and to the Office of Management and Budget, Paperwork Reduction Project (9000-0004), Washington, D.C. 20503.

Purpose:

The policy of the Federal Government in acquiring architectural, engineering, and related professional services is to encourage firms lawfully engaged in the practice of those professions to submit annually a statement of qualifications and performance data. Standard Form 254, "Architect-Engineer and Related Services Questionnaire," is provided for that purpose. Interested A-E firms (including new, small, and/or minority firms) should complete and file SF 254's with each Federal agency and with appropriate regional or district offices for which the A-E is qualified to perform services. The agency head for each proposed project shall evaluate these qualification resumes, together with any other performance data on file or requested by the agency, in relation to the proposed project. The SF 254 may be used as a basis for selecting firms for discussions, or for screening firms preliminary to inviting submission of additional information.

Definitions:

"**Architect-Engineer Services**" are defined in Part 36 of the Federal Acquisition Regulation.

"**Parent Company**" is that firm, company, corporation, association or conglomerate which is the major stockholder or highest tier owner of the firm completing this questionnaire; i.e., Firm A is owned by Firm B which is, in turn, a subsidiary of Corporation C. The "parent company" of Firm A is Corporation C.

"**Principals**" are those individuals in a firm who possess legal responsibility for its management. They may be owners, partners, corporate officers, associates, administrators, etc.

"**Discipline**," as used in this questionnaire, refers to the primary technological capability of individuals in the responding firm. Possession of an academic degree, professional registration, certification, or extensive experience in a particular field of practice normally reflects an individual's primary technical discipline.

"**Joint Venture**" is a collaborative undertaking by two or more firms or individuals for which the participants are both jointly and individually responsible.

"**Consultant**," as used in this questionnaire, is a highly specialized individual or firm having significant input and responsibility for certain aspects of a project and possessing unusual or unique capabilities for assuring success of the finished work.

"**Prime**" refers to that firm which may be coordinating the concerted and complementary inputs of several firms, individuals or related services to produce a completed study or facility. The "prime" would normally be regarded as having full responsibility and liability for quality of performance by itself as well as by subcontractor professionals under its jurisdiction.

"**Branch Office**" is a satellite, or subsidiary extension, of a headquarters office of a company, regardless of any differences in name or legal structure of such a branch due to local or state laws. "Branch offices" are normally subject to the management decisions, bookkeeping, and policies of the main office.

Instructions for Filing (Numbers below correspond to numbers contained in form):

1. Type accurate and complete name of submitting firm, its address, and zip code.
 - 1a. Indicate whether form is being submitted in behalf of a parent firm or a branch office. (Branch office submissions should list only personnel in, and experience of, that office.)
2. Provide data the firm was established under the name shown in question 1.
3. Show date on which form is prepared. All information submitted shall be current and accurate as of this date.
4. Enter type of ownership, or legal structure, of firm (sole proprietor, partnership, corporation, joint venture, etc.)

Check appropriate boxes indicating if firm is (a) a small business concern; (b) a small business concern owned and operated by socially and economically disadvantaged individuals; and (c) Woman-owned (See 48 CFR 19.101 and 52.219-9).
5. Branches of subsidiaries of large or parent companies, or conglomerates, should insert name and address of highest-tier owner.
 - 5a. If present firm is the successor to, or outgrowth of, one or more predecessor firms, show name(s) of former entity(ies) and the year(s) of their original establishment.
6. List not more than two principals from submitting firm who may be contacted by the agency receiving this form. (Different principals may be listed on forms going to another agency.) Listed principals must be empowered to speak for the firm on the policy and contractual matters.
7. Beginning with the submitting office, list name, location, total number of personnel, and telephone numbers for all associated or branch offices, (including any headquarters or foreign offices) which provides A-E and related services.
 - 7a. Show total personnel in all offices. (Should be sum of all personnel, all branches.)
8. Show total number of employees, by discipline, in submitting office. (*If form is being submitted by main headquarters office, firm should list total employees, by discipline, in all offices.) While some personnel may be qualified in several disciplines, each person should be counted only once in accord with his or her primary function. Include clerical personnel as "administrative." Write in any additional disciplines—sociologists, biologists, etc.—and number of people in each, in blank spaces.

Architect-Engineer and Related Services Questionnaire

9. Using chart (below) insert appropriate index number to indicate range of professional services fees received by submitting firm each calendar year for last five years, most recent year first. Fee summaries should be broken down to reflect the fees received each year for (a) work performed directly for the Federal Government (not including grant and loan projects) or as a sub to other professionals performing work directly for the Federal Government; (b) all other domestic work, U.S. and possessions, including Federally-assisted projects, and (c) all other foreign work.

Ranges of Professional Services Fees

INDEX	INDEX
1. Less than \$100,000	5. \$1 million to \$2 million
2. \$100,000 to \$250,000	6. \$2 million to \$5 million
3. \$250,000 to \$500,000	7. \$5 million to \$10 million
4. \$500,000 to \$1 million	8. \$10 million or greater

10. Select and enter, in numerical sequence, **not more than thirty (30)** "Experience Profile Code" numbers from the listing (next page) which most accurately reflect submitting firm's demonstrated technical capabilities and project experience. **Carefully review list.** (It is recognized some profile codes may be part of other services or projects contained on list; firms are encouraged to select profile codes which best indicate type and scope of services provided on past projects.) For each code number, show total number of projects and gross fees (in thousands) received for profile projects performed by firm during past few years. If firm has one or more capabilities not included on list, insert same in blank spaces at end of list and show numbers in question 10 on the form. In such cases, the filled-in listing **must** accompany the complete SF 254 when submitted to the Federal agencies.
11. Using the "Experience Profile Code" numbers in the same sequence as entered in item 10, give details of at least one recent (within the last five years) representative project for each code number, up to a **maximum** of thirty (30) separate projects, or portions of projects, for which firm was responsible. (Project examples may be used more than once to illustrate different services rendered on the same job. Example: a dining hall may be part of an auditorium or educational facility.) Firms which select less than thirty "profile codes" may list two or more project examples (to illustrate specialization) for each code number so long as total of all project examples does not exceed thirty (30). After each code number in question 11, show: (a) whether firm was "P," the prime professional, or "C," a consultant, or "JV," part of a joint venture on that particular project (new firms, in existence less than five (5) years may use the symbol "IE" to indicate "Individual Experience" as opposed to

firm experience); (b) provide name and location of the specific project which typifies firm's (or individual's) performance under that code category; (c) give name and address of the owner of that project (if government agency indicate responsible office); (d) show the estimated construction cost (or other applicable cost) for that portion of the project for which the firm was primarily responsible. (Where no construction was involved, show approximate cost of firm's work); and (e) state year work on that particular project was, or will be, completed.

12. The completed SF 254 should be signed by a principal of the firm, preferably the chief executive officer.
13. Additional data, brochures, photos, etc. should not accompany this form unless specifically requested.

NEW FIRMS (not recognized or recently-amalgamated firms) are eligible and encouraged to seek work from the Federal Government in connection with performance of projects for which they are qualified. Such firms are encouraged to complete and submit Standard Form 254 to appropriate agencies. Questions on the form dealing with personnel or experience may be answered by citing experience and capabilities of individuals in the firm, based on performance and responsibility while in the employ of others. In so doing, notation of this fact should be made on the form. In question 9, write in "N/A" to indicate "not applicable" for those years prior to firm's organization.

Experience Profile Code
Numbers
for use with questions 10 and 11

001 Acoustics, Noise Abatement
 002 Aerial Photogrammetry
 003 Agricultural Development; Grain Storage; Farm
 Mechanization
 004 Air Pollution Control
 005 Airports; Navais; Airport Lighting; Aircraft Fueling
 006 Airports; Terminals and Hangers; Freight Handling
 007 Arctic Facilities
 008 Auditoriums and Theatres
 009 Automation; Controls; Instrumentation
 010 Barracks; Dormitories
 011 Bridges
 012 Cemeteries (*Planning and Relocation*)
 013 Chemical Processing and Storage
 014 Churches; Chapels
 015 Codes; Standards; Ordinances
 016 Cold Storage; Refrigeration; Fast Freeze
 017 Commercial Building (*low rise*); Shopping Centers
 018 Communications Systems; TV; Microwave
 019 Computer Facilities; Computer Service
 020 Conservation and Resource Management
 021 Construction Management
 022 Corrosion Control; Cathodic Protection; Electrolysis
 023 Cost Estimating
 024 Dams (*Concrete; Arch*)
 025 Dams (*Earth; Rock*); Dikes; Levees
 026 Desalination (*Process and Facilities*)
 027 Dining Halls; Clubs; Restaurants
 028 Ecological and Archeological Investigations
 029 Educational Facilities; Classrooms
 030 Electronics
 031 Elevators; Escalators; People-Movers
 032 Energy Conservation; New Energy Sources
 033 Environmental Impact Studies, Assessments, or
 Statements
 034 Fallout Shelters; Blast-Resistant Design
 035 Field Houses; Gyms; Stadiums
 036 Fire Protection
 037 Fisheries; Fish Ladders
 038 Forestry and Forest Products
 039 Garages; Vehicle Maintenance Facilities; Parking
 Decks
 040 Gas Systems (Propane; Natural, etc.)
 041 Graphic Design

042 Harbors; Jetties; Piers; Ship Terminal Facilities
 043 Heating; Ventilating; Air Conditioning
 044 Health Systems Planning
 045 High-rise; Air-Rights-Type Buildings
 046 Highways; Streets; Airfield Paving; Parking Lots
 047 Historical Preservation
 048 Hospital and Medical Facilities
 049 Hotels; Models
 050 Housing (*Residential; Multi-Family; Apartments;
 Condominiums*)
 051 Hydraulics and Pneumatics
 052 Industrial Buildings; Manufacturing Plants
 053 Industrial Processes; Quality Control
 054 Industrial Waste Treatment
 055 Interior Design; Space Planning
 056 Irrigation; Drainage
 057 Judicial and Courtroom Facilities
 058 Laboratories; Medical Research Facilities
 059 Landscape Architecture
 060 Libraries; Museums; Galleries
 061 Lighting (*Interiors; Display; Theatre, etc.*)
 062 Lighting (*Exteriors; Streets; Memorials; Athletic Fields,
 etc.*)
 063 Materials Handling Systems; Conveyors; Sorters
 064 Metallurgy
 065 Microclimatology; Tropical Engineering
 066 Military Design Standards
 067 Mining and Mineralogy
 068 Missile Facilities (*Silos; Fuels; Transport*)
 069 Modular Systems Design; Pre-Fabricated Structures or
 Components
 070 Naval Architecture; Off-Shore Platforms
 071 Nuclear Facilities; Nuclear Shielding
 072 Office Buildings; Industrial Parks
 073 Oceanographic Engineering
 074 Ordnance; Munitions; Special Weapons
 075 Petroleum Exploration
 076 Petroleum and Fuel (*Storage and Distribution*)
 077 Pipelines (*Cross-Country - Liquid and Gas*)
 078 Planning (*Community, Regional, Areawide and State*)
 079 Planning (*Site, Installation, and Project*)
 080 Plumbing and Piping Design
 081 Pneumatic Structures; Air-Support Buildings
 082 Postal Facilities
 083 Power Generation; Transmission; Distribution
 084 Prison and Correctional Facilities
 085 Product; Machine and Equipment Design

086 Radar; Sonar; Radio and Radar Telescope
 087 Railroad; Rapid Transit
 088 Recreation Facilities (*Parks; Marinas, etc.*)
 089 Rehabilitation (*Buildings; Structures; Facilities*)
 090 Resource Recovery; Recycling
 091 Radio Frequency Systems and Shieldings
 092 Rivers; Canals; Waterways; Flood Control
 093 Safety Engineering; Accident Studies; OSHA Studies
 094 Security Systems; Intruder and Smoke Detection
 095 Seismic Designs and Studies
 096 Sewage Collection; Treatment; Disposal
 097 Soils and Geologic Studies; Foundations
 098 Solar Energy Utilization
 099 Solid Wastes; Incineration; Landfill
 100 Special Environments; Clean Rooms, etc.
 101 Structural Design; Special Structures
 102 Surveying; Platting; Mapping; Flood Plain Studies
 103 Swimming Pools
 104 Storm Water Handling and Facilities
 105 Telephone Systems (*Rural; Mobile; Intercom, etc.*)
 106 Testing and Inspection Services
 107 Traffic and Transportation Engineering
 108 Towers (*Self-Supporting and Guyed Systems*)
 109 Tunnels and Subways
 110 Urban Renewals; Community Development
 111 Utilities (*Gas and Steam*)
 112 Value Analysis; Life-Cycle Costing
 113 Warehouses and Depots
 114 Water Resources; Hydrology; Ground Water
 115 Water Supply; Treatment and Distribution
 116 Wind Tunnels; Research/Testing Facilities Design
 117 Zoning; Land Use Studies
 201 _Laboratory Testing Services

202 _____
 203 _____
 204 _____
 205 _____

STANDARD FORM (SF)

254

Architect-Engineer
And Related Services
Questionnaire

1. Firm Name/Business Address:

Air Water & Soil Laboratories, Inc.
2109 A North Hamilton Street
Richmond, Virginia 23230

1a. Submittal is for Parent Company Branch or Subsidiary Office

2. Year Present Firm
Established 1994

Date Prepared 10/31/02

4. Specify type of ownership and check below, if applicable.

- A. Small Business
- B. Small Disadvantaged Business
- C. Woman-owned Business

5. Name of Parent Company, if any:

5a. Former Parent Company Name(s), if any, and Year(s) Established:

6. Names of not more than Two Principals to Contact: Title/Telephone

- 1) Carmela L. Tombes, President/CEO (804) 358-8295
- 2) Timothy G. Ungerleider, Vice President/Secretary (804)358-8295

7. Present Offices: City / State / Telephone / No. Personnel Each Office

7a. Total Personnel 14 _____

Richmond, Virginia 23230/ (804)358-8295

8. Personnel by Discipline: (List each person only once, by primary function.)

- | | | | |
|---|---|---|--|
| <input checked="" type="checkbox"/> 2_ Administrative | <input type="checkbox"/> Electrical Engineers | <input type="checkbox"/> Oceanographers | <input checked="" type="checkbox"/> 5_ Chemist |
| <input type="checkbox"/> Architects | <input type="checkbox"/> Estimators | <input type="checkbox"/> Planners: Urban/Regional | <input checked="" type="checkbox"/> 5_ Biologists |
| <input type="checkbox"/> Chemical Engineers | <input type="checkbox"/> Geologists | <input type="checkbox"/> Sanitary Engineers | <input checked="" type="checkbox"/> 2_ Environmental Science |
| <input type="checkbox"/> Civil Engineers | <input type="checkbox"/> Hydrologists | <input type="checkbox"/> Soils Engineers | _____ |
| <input type="checkbox"/> Construction Inspectors | <input type="checkbox"/> Interior Designers | <input type="checkbox"/> Specification Writers | _____ |
| <input type="checkbox"/> Draftsmen | <input type="checkbox"/> Landscape Architects | <input type="checkbox"/> Structural Engineers | _____ |
| <input type="checkbox"/> Ecologists | <input type="checkbox"/> Mechanical Engineers | <input type="checkbox"/> Surveyors | _____ |
| <input type="checkbox"/> Economists | <input type="checkbox"/> Mining Engineers | <input type="checkbox"/> Transportation Engineers | _____ |

9. Summary of Professional Services Fees

Received: (Insert index number)

Last 5 Years (most recent year first)

	2001	2000	1999	1998	1997
Direct Federal contract work, including overseas	5	5	5	4	4
All other domestic work	_____	_____	_____	_____	_____
All other foreign work *	_____	_____	_____	_____	_____

Ranges of Professional Services Fees INDEX

- 1. Less than \$100,000
- 2. \$100,000 to \$250,000
- 3. \$250,000 to \$500,000
- 4. \$500,000 to \$1 million
- 5. \$1 million to \$2 million
- 6. \$2 million to \$5 million
- 7. \$5 million to \$10 million
- 8. \$10 million or greater

*Firms interested in foreign work, but without such experience, check here:

10. Profile of Firm's Project Experience, Last 5 Years

Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)
1) 201	12,942	5,905	11)			21)		
2)			12)			22)		
3)			13)			23)		
4)			14)			24)		
5)			15)			25)		
6)			16)			26)		
7)			17)			27)		
8)			18)			28)		
9)			19)			29)		
10)			20)			30)		

11. Project Examples, Last 5 Years

Profile Code	"P," "C," "JV," or "IE"	Project Name and Location	Owner Name and Address	Cost of Work (in thousands)	Completion Date (Actual or Estimated)
201	C	1 Fort A.P. Hill Doswell, VA	URS Dames & Moore 5540 Falmouth, Suite 202 Richmond, Virginia 23230	18.3	12/98
201	C	2 Haw River Daytona, North Carolina	APEX Environmental 468 Southlake Road Richmond, Virginia 23236	24.5	12/98
201	C	3 Virginia Landfills Gin Hill/Robinson Road	Rust Environmental & Infrastructure 1029 Technology Park Glen Allen, Virginia 23060	17.4	12/98
201	C	4 Keller Industries	IEC 4900 Augusta Avenue Suite 105 Richmond, Virginia 23230	18.6	12/98
201	C	5 Virginia State Lead	Omega Environmental Services 8040 Kimway Drive Richmond, Virginia 23228	71.2	12/98
201	C	6 Lucent Technologies	Earth Tech 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228	8.6	7/99
201	C	7 Southern States – Milford DE	VISTA Environmental 10998 Leadbetter Road, Suite C Ashland, Virginia 23005	81.1	12/99

201	P	8	Wood Preservers Permit Work	Wood Preservers 15935 Historyland Hwy. Warsaw, VA 22572	9.8	10/99
201	C	9	USG - Weirton	SECOR International, Inc. 575A Southlake Blvd. Richmond, Virginia 23236	8.7	11/99
201	P	10	CSX Permit Work	CSX Transportation One CSX Road Richmond, Virginia 23230	13.0	12/99
201	P	11	Philip Morris USA Richmond, Virginia	Armentrout & Associates 6010 Crestwood Ave Richmond, Virginia 23230	25.8	1/00
201	C	12	Coachmen Industries/Mod-U-Kraft	Environmental Resources Management 9701 Metropolitan Ct., Suite A Richmond, Virginia 23236	26.7	6/00
201	P	13	4H Center	DeTech, Inc. 17624 Evers Court Hamilton, VA 20158-3425	26.5	12/00
201	C	14	Emporia Foundry	Hatcher-Sayre, Inc. 905 Southlake Blvd Richmond, Virginia 23236	15.9	1/01
201	C	15	Pax River	Environmental Resources Management 9701 Metropolitan Ct., Suite A Richmond, Virginia 23236	11.2	2/01
201	C	16	UST's	J.L. Bishop Contractors 700 Grove Road, Suite A Midlothian, Virginia 23113	33.5	4/01
201	C	17	Enron Landfill	URS Dames & Moore 5540 Falmouth, Suite 202 Richmond, Virginia 23230	26.5	4/01
201	C	18	FBI Quantico	Harding ESE, a MACTEC Company 9401 Mathy Dr., Suite 300 Fairfax, Virginia 22031	14.9	6/01
201	C	19	Motiva/Fairfax	Equiva Services 3800 Pickett Road Fairfax, Virginia 22031	29.8	5/01

201	C	20	Quantico Firing Range	Earth Tech, Inc. 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228	18.0	11/02
201	C	21	Continental Teves - RFI	APEX Environmental, Inc. 9300 Forest Point Circle Manassas, Virginia 20110	84.0	11/02
201	C	22	Landfills/Various Projects	SCS Engineers, Inc. 11260 Roger Bacon Drive Reston, Virginia 20190	27.0	12/01
201	C	23	Landfills/Various Projects	SCS Engineers, Inc. 407 S. Loudoun Street Winchester, VA 22601	93.0	10/02
201	C	24	Fairfax County	Fairfax County Dept. of Purchasing & Supply Management 12000 Government Center Parkway, Suite 427 Fairfax, Virginia 22035-0013	59.0	10/02
201	C	25	Equiva/Motiva	Equiva Services 3800 Pickett Road Fairfax, Virginia 22031	248	10/02
		26				
		27				
		28				
		29				
		30				

12. The foregoing is a statement of facts

Signature: Carmela L. Tombes

Typed Name and Title: Carmela L. Tombes, President

Date:

10/31/02

Standard Form 254

E2CR, Inc.

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

**STANDARD
FORM (SF)**

254

Architect-Engineer
And Related Services
Questionnaire

1. Firm Name/Business Address:

E2CR, Inc.
9004 Yellow Brick Road, Suite E
Baltimore, Maryland 21237
ACASS No. 021100

1a. Submittal is for Parent Company Branch or Subsidiary Office

**2. Year Present Firm
Established: 1993**

**3. Date Prepared:
April 10, 2002**

**4. Specify type of ownership and check below, if applicable.
Minority Business Enterprise (MDOT # 98-293)**

- A. Small Business
 B. Small Disadvantaged Business
 C. Woman-owned Business

5. Name of Parent Company, if any:

N/A.

5a. Former Parent Company Name(s), if any, and Year(s) Established:

N/A.

6. Names of not more than Two Principals to Contact: Title/Telephone

1) Siva Balu, P.E., CEO

Telephone: 410-574-4393;

Fax: 410-574-7970.

2) Sachinder N. Gupta, P.E., President

7. Present Offices: City / State / Telephone / No. Personnel Each Office

7a. Total Personnel

35

Baltimore / Maryland / 410-574-4393 / 35

8. Personnel by Discipline: (List each person only once, by primary function.)

- | | | | |
|---|---|---|---|
| <u>3</u> Administrative | <input type="checkbox"/> Electrical Engineers | <input type="checkbox"/> Oceanographers | <u>2</u> Drillers |
| <input type="checkbox"/> Architects | <input type="checkbox"/> Estimators | <input type="checkbox"/> Planners: Urban/Regional | <input type="checkbox"/> Mechanic |
| <input type="checkbox"/> Chemical Engineers | <u>2</u> Geologists | <input type="checkbox"/> Sanitary Engineers | <input type="checkbox"/> Construction Personnel |
| <u>4</u> Civil Engineers | <input type="checkbox"/> Hydrologists | <u>6</u> Soils Engineers | _____ |
| <u>17</u> Construction Inspectors | <input type="checkbox"/> Interior Designers | <input type="checkbox"/> Specification Writers | _____ |
| <u>1</u> Draftsmen | <input type="checkbox"/> Landscape Architects | <input type="checkbox"/> Structural Engineers | _____ |
| <input type="checkbox"/> Ecologists | <input type="checkbox"/> Mechanical Engineers | <input type="checkbox"/> Surveyors | _____ |
| <input type="checkbox"/> Economists | <input type="checkbox"/> Mining Engineers | <input type="checkbox"/> Transportation Engineers | <u>35</u> Total Personnel |

9. Summary of Professional Services Fees

Received: (Insert Index number)

Last 5 Years (most recent year first)

	2001	2000	1999	1998	1997
Direct Federal contract work, including overseas	1	1	1	1	1
All other domestic work	6	6	6	5	5
All other foreign work*	-	-	-	-	-

**Ranges of Professional Services Fees
INDEX**

1. Less than \$100,000
2. \$100,000 to \$250,000
3. \$250,000 to \$500,000
4. \$500,000 to \$1 million
5. \$1 million to \$2 million
6. \$2 million to \$5 million
7. \$5 million to \$10 million
8. \$10 million or greater

*Firms interested in foreign work, but without such experience, check here:

Experience Profile Code Numbers
for use with questions 10 and 11

- | | | |
|---|--|---|
| 001 Acoustics, Noise Abatement | 042 Harbors; Jetties; Piers; Ship Terminal Facilities | 086 Radar; Sonar; Radio and Radar Telescope |
| 002 Aerial Photogrammetry | 043 Heating; Ventilating; Air Conditioning | 087 Railroad; Rapid Transit |
| 003 Agricultural Development; Grain Storage; Farm Mechanization | 044 Health Systems Planning | 088 Recreation Facilities (<i>Parks; Marinas, etc.</i>) |
| 004 Air Pollution Control | 045 High-rise; Air-Rights-Type Buildings | 089 Rehabilitation (<i>Buildings; Structures; Facilities</i>) |
| 005 Airports; Navais; Airport Lighting; Aircraft Fueling | 046 Highways; Streets; Airfield Paving; Parking Lots | 090 Resource Recovery; Recycling |
| 006 Airports; Terminals and Hangers; Freight Handling | 047 Historical Preservation | 091 Radio Frequency Systems and Shieldings |
| 007 Arctic Facilities | 048 Hospital and Medical Facilities | 092 Rivers; Canals; Waterways; Flood Control |
| 008 Auditoriums and Theatres | 049 Hotels; Models | 093 Safety Engineering; Accident Studies; OSHA Studies |
| 009 Automation; Controls; Instrumentation | 050 Housing (<i>Residential; Multi-Family; Apartments; Condominiums</i>) | 094 Security Systems; Intruder and Smoke Detection |
| 010 Barracks; Dormitories | 051 Hydraulics and Pneumatics | 095 Seismic Designs and Studies |
| 011 Bridges | 052 Industrial Buildings; Manufacturing Plants | 096 Sewage Collection; Treatment; Disposal |
| 012 Cemeteries (<i>Planning and Relocation</i>) | 053 Industrial Processes; Quality Control | 097 Soils and Geologic Studies; Foundations |
| 013 Chemical Processing and Storage | 054 Industrial Waste Treatment | 098 Solar Energy Utilization |
| 014 Churches; Chapels | 055 Interior Design; Space Planning | 099 Solid Wastes; Incineration; Landfill |
| 015 Codes; Standards; Ordinances | 056 Irrigation; Drainage | 100 Special Environments; Clean Rooms, etc. |
| 016 Cold Storage; Refrigeration; Fast Freeze | 057 Judicial and Courtroom Facilities | 101 Structural Design; Special Structures |
| 017 Commercial Building (<i>low rise</i>); Shopping Centers | 058 Laboratories; Medical Research Facilities | 102 Surveying; Platting; Mapping; Flood Plain Studies |
| 018 Communications Systems; TV; Microwave | 059 Landscape Architecture | 103 Swimming Pools |
| 019 Computer Facilities; Computer Service | 060 Libraries; Museums; Galleries | 104 Storm Water Handling and Facilities |
| 020 Conservation and Resource Management | 061 Lighting (<i>Interiors; Display; Theatre, etc.</i>) | 105 Telephone Systems (<i>Rural; Mobile; Intercom, etc.</i>) |
| 021 Construction Management | 062 Lighting (<i>Exteriors; Streets; Memorials; Athletic Fields, etc.</i>) | 106 Testing and Inspection Services |
| 022 Corrosion Control; Cathodic Protection; Electrolysis | 063 Materials Handling Systems; Conveyors; Sorters | 107 Traffic and Transportation Engineering |
| 023 Cost Estimating | 064 Metallurgy | 108 Towers (<i>Self-Supporting and Guyed Systems</i>) |
| 024 Dams (<i>Concrete; Arch</i>) | 065 Microclimatology; Tropical Engineering | 109 Tunnels and Subways |
| 025 Dams (<i>Earth; Rock</i>); Dikes; Levees | 066 Military Design Standards | 110 Urban Renewals; Community Development |
| 026 Desalination (<i>Process and Facilities</i>) | 067 Mining and Mineralogy | 111 Utilities (<i>Gas and Steam</i>) |
| 027 Dining Halls; Clubs; Restaurants | 068 Missile Facilities (<i>Silos; Fuels; Transport</i>) | 112 Value Analysis; Life-Cycle Costing |
| 028 Ecological and Archeological Investigations | 069 Modular Systems Design; Pre-Fabricated Structures or Components | 113 Warehouses and Depots |
| 029 Educational Facilities; Classrooms | 070 Naval Architecture; Off-Shore Platforms | 114 Water Resources; Hydrology; Ground Water |
| 030 Electronics | 071 Nuclear Facilities; Nuclear Shielding | 115 Water Supply; Treatment and Distribution |
| 031 Elevators; Escalators; People-Movers | 072 Office Buildings; Industrial Parks | 116 Wind Tunnels; Research/Testing Facilities Design |
| 032 Energy Conservation; New Energy Sources | 073 Oceanographic Engineering | 117 Zoning; Land Use Studies |
| 033 Environmental Impact Studies, Assessments, or Statements | 074 Ordnance; Munitions; Special Weapons | 201 Geotechnical Instrumentation |
| 034 Fallout Shelters; Blast-Resistant Design | 075 Petroleum Exploration | 202 Test Borings |
| 035 Field Houses; Gyms; Stadiums | 076 Petroleum and Fuel (<i>Storage and Distribution</i>) | 203 Well Installation |
| 036 Fire Protection | 077 Pipelines (<i>Cross-Country - Liquid and Gas</i>) | 204 Removal of USTs/Remediation |
| 037 Fisheries; Fish Ladders | 078 Planning (<i>Community, Regional, Areawide and State</i>) | 205 Environmental Clean-Up |
| 038 Forestry and Forest Products | 079 Planning (<i>Site, Installation, and Project</i>) | 206 Asbestos Inspection |
| 039 Garages; Vehicle Maintenance Facilities; Parking Decks | 080 Plumbing and Piplng Design | |
| 040 Gas Systems (Propane; Natural, etc.) | 081 Pneumatic Structures; Air-Support Buildings | |
| 041 Graphic Design | 082 Postal Facilities | |
| | 083 Power Generation; Transmission; Distribution | |
| | 084 Prison and Correctional Facilities | |
| | 085 Product; Machine and Equipment Design | |

10. Profile of Firm's Project Experience, Last 5 Years

Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)
1) 025	15	800	9) 201	4	50	16) 006	3	280
2) 033	8	100	10) 202	300	2,600	17) 011	30	400
3) 046	90	500	11)			18) 087	5	280
4) 093	1	10	12)			19) 109	4	100
5) 097	400	4,800	13)			20)		
6) 099	4	300	14) 203	40	250	21)		
7) 106	100	2,000	15) 204	60	700	22)		
8) 114	10	60				23)		

11. Project Examples, Last 5 Years

Profile Code	"P," "C," "JV," or "IE"	Project Name and Location	Owner Name and Address	Cost of Work (in thousands)	Completion Date (Actual or Estimated)
106	P	1 Open-end Construction Inspection Maryland Transportation Authority	Maryland Transportation Authority 303 Authority Drive Baltimore, Maryland 21222	100	1999
106	C	2 Supplemental Construction Inspection Services Districts 1, 2, 3, 4, 6 & 7 (Open-end Construction Inspection)	Maryland State Highway Administration 707 N. Calvert Street, Baltimore, MD 21203 Mr. Dick Weddle 410-545-0080	1,800	2004
097 202 203	C	3 Rehabilitation of Reactors & Chromium Testing Patapsco Wastewater Treatment Plant Baltimore, Maryland	Baltimore City Department of Public Works Abel Wolman Building Baltimore, Maryland 21202	100	2000
033 097 202, 203 & 204	C	4 Evaluation of 250+ Underground Storage Tanks City of Baltimore Baltimore, Maryland	Baltimore City Department of Public Works Abel Wolman Building Baltimore, Maryland 21202	500+	2002
097 025	C	5 Open-end Geotechnical Services Maryland Port Administration Baltimore, Maryland	Gahagan & Bryant Associates 9008 Yellow Brick Road, Unit O Baltimore, Maryland 21237	300+	2002
99 106	C	6 Brown Station Landfill Prince George's County, MD (Open-end construction inspection)	EA Engineering, Science & Technology 11019 McCormick Dr., Hunt Valley 21030 Mr. Sam Davis 410-286-9816	200+	2000
106	C	7 Back River WWTP and Ashburton Filtration Plant, Baltimore, MD (Open-end construction inspection)	City of Baltimore, Dept. of Public Works 200 Abel Wolman Municipal Building Baltimore, MD 21202	280	2002

106	C	8 Patapsco Waste Water Treatment Plant BNR Facility, Oxygen Reactor, Chrome Evaluation, Truck Scale Facilities, etc. Baltimore, Maryland	Sub Consultant to JMT, KCI, Dewberry & Davis City of Baltimore - DPW Baltimore, MD 21202	455+	2002
205	P	9 Woodrow Wilson Bridge – On-site Laboratory Testing, Construction Inspection & Management Prince George's County, Maryland	Potomac Crossing Consultants 6009 Oxon Hill Road, Suite 414, Oxon Hill, MD Mr. Larry Anderson 301-749-8801	3,300	2005
204	P	10 WSSC – Basic Order Agreement Open End Geotechnical Engineering Services Prince George's and Montgomery Counties, MD	Subconsultant to WM & A, KCI & CFS WM&A – Joe Siemek 410-494-9093 CFS - Chris Matthers 410-381-7500 KCI - Larry Keller 410-316-7800	260+	2003
202 109 87, 203	P	11 Subsurface Exploration & Installation of Monitoring Wells for Branch Avenue Route Largo Center and New York Substations	WMATA – 600 Fifth Street, N.W. Washington, D.C. 20001 c/o: Capital Transit Consultants, Mr. Ravi Bassi 703-247-6548	300+	2001
097 202	C	12 Open-end Geotechnical Services Department of Public Works City of Baltimore, Maryland	Engineering Technologies & Associates 3458 Center Drive, Ellicott City, MD 21043 Mr. Don Koch 410-461-9920	110+	2002
202 203	C	13 Installation of Triple and Double Cased Wells, Philadelphia Airport (Subconsultant to NFE, Inc.)	Weston - 1 Weston Way Westchester, PA 19380-1494 Mr. Larry Ross 508-543-1700	210	1997
097	C	14 Woodrow Wilson Bridge – Landside Improvements P.G. County, Maryland	KCI Technologies, Inc. 10 North Park Drive, Hunt Valley, MD 21030 Mr. Eric Klein 410-316-7800	80	2001
204	P	15 Removal & Replacement of UST Maryland Public Television Baltimore, Maryland	Department of General Services 301 W. Preston Street Baltimore, Maryland 21201	58	1998
097 202	C	16 Open-end Geotechnical Services Department of Public Works City of Baltimore, Maryland	URS Greiner, Woodard & Clyde 4 North Park Drive Hunt Valley, MD 21030	70+	2000
87, 97 106 202	C	17 Geotechnical Investigation Light Rail Double Tracking Sec. 7 & 8 Anne Arundel County, Maryland	Parsons Transportation Group 10 East Baltimore Street, Suite 801, Baltimore Mr. Art Keffler 410-223-2740	150	2002
097 202	C	18 Lafayette Avenue Bridge Over Amtrak Rehabilitation & Reconstruction Baltimore, Maryland	Wallace Montgomery & Associates 110 West Road, Suite 345, Towson, MD 21204 Mr. Stuart Taub, P.E. 410-494-9093	120+	2002
097 202	C	19 Design and Improve roadway system at Back River Wastewater Treatment Plant Baltimore, Maryland	ICOT, Inc. 2124 Maryland Avenue, Suite 4 Baltimore, Maryland 21218	140	1998

206	C	20 DC Public School Systems Washington, DC	EA Engineering 11019 McCormick Road, Hunt Valley, 21031 Mr. Anwar Hazan 410-771-4950	61	1999
006 046 097 202 & 203	P	20 International Airport Pier F and 9 Story Parking Garage Terminal Roadways & Associates Structures BWI Airport, Maryland	Parsons Brinkerhoff 301 North Charles Street Baltimore, Maryland 21201 Mr. Jerri Janetti 410-727-5050	280+	2002
097 202	C	22 Geotechnical Investigation for WSSC Consolidated Laboratory Facility Montgomery County, Maryland	Washington Suburban Sanitary Commission 14501 Sweitzer Lane Laurel, MD 20707 Mr. Austin Freeman 301-206-8000	15	1998
033 097 202	C	23 Poplar Island Modifications & Sharps Island Dredged Material Disposal Facilities Chesapeake Bay, Maryland	Moffatt & Nichol Engineers 2700 Lighthouse Point East, Suite 501 Baltimore, Maryland 21224 Mr. Pete Kotulak, P.E. 410-563-7300	400+	2002
097 202	C	24 Dredged Material Disposal Facilities Parsons & Eastern Neck Islands - Chesapeake Bay, Inner Harbor Islands and Site 170 Chesapeake Bay, Maryland	E A Engineering Science & Technology 15 Loveton Circle Sparks, Maryland 21152 Mr. Frank Plne 410-771-4950	300	2002
97, 99 202 203	C	25 Geotechnical Engineering Quarantine Road Landfill Services Baltimore, Maryland	East Star Environmental 11609 Edmonston Road, Beltsville, MD 20705 Mr. Al Free 301-595-3783	100+	2000
087 202 109	C	26 Subsurface Investigation Dulles Corridor - METRO Extension Fairfax County, Maryland	WMATA-c/o: Law Engin. & Environ. Svcs. 4465 Brookfield Corporate Drive Chantilly, VA 20151 703-968-4700	140	2001
025 097 201 & 202	C	27 Poplar Island Restoration (Dredged Material Disposal) Chesapeake Bay, Maryland	Gahagan & Bryant Associates, Inc. 9008-O Yellow Brick Rd, Baltimore 21237 Mr. Richard Thomas 410-682-5595	230	2000
097 202 046	C	28 Open-End Primary Engineering Services Montgomery County, Maryland	Wallace Montgomery & Associates 110 West Road, Suite 345, Towson, MD 21204 Mr. Jim Montgomery 410-494-9093	280+	2002
011 097 202 046	C	29 Rehabilitation of Robert Lee Pedestrian Bridge, Frederick Avenue Bridge & Lafayette Ave. Bridge City of Baltimore, Maryland	Bureau of Transportation - City of Baltimore 417 East Fayette Street Baltimore, Maryland 21202 Mr. Richard Chen 410-396-6835	250	2001
106	C	30 Construction Inspection Papermill Road Bridge Baltimore, Maryland	City of Baltimore Dept. of Public Works Abel Wolman Bldg., Baltimore, 21202 Mr. Amar Sokhey 410-396-3437	80+	2000

12. The foregoing is a statement of facts

Signature: 

Typed Name and Title: Siva Balu, P.E., CEO

Date: April 10, 2002

10. Use this space to provide any additional information of description of resources supporting your firm's qualifications for the proposed project:

E2CR, Inc. is an engineering and construction firm that specializes in Geotechnical Engineering, Environmental Engineering, hazardous waste contamination sampling and testing, in-house laboratory testing of soil and concrete, and Construction Inspection. We have a full-time staff of 35, which includes 17 inspectors. Most of our inspectors have a BA/BS degree and are NICET Certified. Our key engineering and support staff have extensive knowledge and experience in many aspects of geotechnical and environmental engineering including numerous projects in Karst topography, Coastal Plain Deposits, Residual Formations and Glacial Till Geological settings.

Our specialties include, but are not limited to, Shallow Foundations, Sinkhole Remediation, Surcharging/Settlement Assessment, Utility Tunneling, Slope Stability Analysis, Pavement Design, Dam/Dike Stability Analysis, Construction Inspection, Subsurface Improvements, Deep Foundations, Deep Dynamic Compaction, Construction Dewatering, UST/AST Design, Removal & Installation, Subsurface Contamination Sampling, Testing & Monitoring, Engineering Supervision of Hazardous Contamination Related Construction and Disposal.

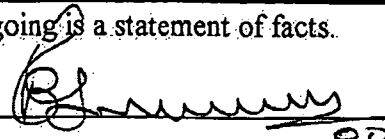
We have four drill rigs capable of drilling with hollow stem augers, mud or casing. We also have a portable styrofoam barge. Thus, we are capable of drilling on land and water. We have wireline equipment for coring rock, wells, and have cored up to 150 feet of rock. The augers range in size from 8 inch O.D. to 16 inch O.D. providing the ability to install up to 12 inch cased wells, and have installed double cased wells up to 150 feet deep in coastal plain deposits.

We have conducted structural inspection and in-situ testing including structural deformation observation; crack mapping, void detection; corrosion potential evaluation; and concrete durability evaluation. We have installed extensive geotechnical instrumentation, including piezometers, slope indicators, strain gauges, tape extensometers, and settlement sensors, and conducted in-situ testing including hydraulic conductivity (falling head test; well pump-out tests) vane shears for strength determination; pressuremeter, dilatometer, and electric cone penetrometer (CPT).

Our construction and engineering staff is 40 hour HAZMAT and HAZWOPER trained, in accordance with OSHA. Our field equipment includes OVA, PID, PPE, bobcats, half-cell potentiometer, backhoes, air compressors, dump trucks, and portable storage tanks. We have cleaned tanks at safety level B; have installed and operated pump-and-treat systems; and have abandoned/removed/installed/upgraded numerous Usts/Asts.

11. The foregoing is a statement of facts.

Signature: _____



Typed Name and Title: Siva Balu, P.E., CEO

Date

April 10, 2002

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers & scientists
