

**Estimated Scope and Budget
Engineering Services - Construction Materials Testing and Geotechnical Services
Heathcote Botanical Park and Gardens Phase 1**

Project Name: Heathcote Botanical Park and Gardens Phase 1 Stormwater Improvement Project City of Ft. Pierce Engineering Attn: Jack Andrews, PE PHB140038 March 7, 2014		Dunkelberger Engineering & Testing, Inc., A Terracon Company 607 NW Commodity Cove Port St. Lucie, Florida 34986 (772) 343-9787 FAX (772) 343-9404 Contact: David T. Youngstrom											
Client: Dunkelberger Proposal No.:													
Date: March 7, 2014													
Itemized CMT Services		Qty	Unit	Price	Amount	Previously Invoiced- Qty	Amount	Progress Invoiced- Qty	Amount	Total To-Date Qty	Amount	Remaining on Contract Qty	Amount
I. Field Observations & Testing													
A. Senior Engineering Technician -Earthwork Observations & Material Sampling		30	hour	\$54.00	\$1,620.00	0	\$0.00	0	\$0.00	0	\$0.00	30	\$1,620.00
B. Density Testing -Embankment -Drainage -Watermain -Compacted Subgrade -Base Course		30	test	\$21.00	\$630.00	0	\$0.00	0	\$0.00	0	\$0.00	30	\$630.00
		170	test	\$21.00	\$3,570.00	0	\$0.00	0	\$0.00	0	\$0.00	170	\$3,570.00
		40	test	\$21.00	\$840.00	0	\$0.00	0	\$0.00	0	\$0.00	40	\$840.00
		30	test	\$21.00	\$630.00	0	\$0.00	0	\$0.00	0	\$0.00	30	\$630.00
		20	test	\$21.00	\$420.00	0	\$0.00	0	\$0.00	0	\$0.00	20	\$420.00
C. Concrete Testing		16	set	\$80.00	\$1,280.00	0	\$0.00	0	\$0.00	0	\$0.00	16	\$1,280.00
D. Pile Driving Inspector (4 days @ 10 hrs/day)		40	hour	\$65.00	\$2,600.00	0	\$0.00	0	\$0.00	0	\$0.00	40	\$2,600.00
Subtotal					\$11,590.00		\$0.00		\$0.00		\$0.00		\$11,590.00
II. Laboratory Testing													
Proctors (T-99 or T-180)		6	test	\$85.00	\$510.00	0	\$0.00	0	\$0.00	0	\$0.00	6	\$510.00
Percent Fines (FM 1-T011)		6	test	\$25.00	\$150.00	0	\$0.00	0	\$0.00	0	\$0.00	6	\$150.00
Limerock Bearing Ratio		2	test	\$275.00	\$550.00	0	\$0.00	0	\$0.00	0	\$0.00	2	\$550.00
Sieve Analysis (T27)		2	test	\$65.00	\$130.00	0	\$0.00	0	\$0.00	0	\$0.00	2	\$130.00
Subtotal					\$1,340.00		\$0.00		\$0.00		\$0.00		\$1,340.00
III. Engineering & Reporting													
Senior Engineer		26	hour	\$120.00	\$3,120.00	0	\$0.00	0	\$0.00	0	\$0.00	26	\$3,120.00
Project Engineer (WEAP Analysis for Pile)		8	hour	\$95.00	\$760.00	0	\$0.00	0	\$0.00	0	\$0.00	8	\$760.00
Administrative Assistant		10	hour	\$42.00	\$420.00	0	\$0.00	0	\$0.00	0	\$0.00	10	\$420.00
Subtotal					\$4,300.00		\$0.00		\$0.00		\$0.00		\$4,300.00
Estimated Total					\$17,230.00		\$0.00		\$0.00		\$0.00		\$17,230.00
ESTIMATED CMT BUDGET OF: \$17,230.00													
PREVIOUS GEOTECHNICAL SERVICES: \$7,760.00													
TOTAL CMT & GEOTECHNICAL BUDGET OF: \$24,990.00													

ATTACHMENT B

Dunkelberger Engineering & Testing, Inc.
Standard Fee Schedule for the City of Ft. Pierce
Construction Materials Testing & Geotechnical Services RFQ No. 6005
Dunkelberger Project No. PSL-10-3233
2011 to 2012

Note: The intent of the contract is to include all labor, materials, transportation, set-up, fuel, equipment, and other items necessary to complete the item of work. All items incidental to or necessary for the completion of the item are included in the price.

SOIL & AGGREGATE TESTING

1. Field Density Test – Nuclear (4 min) (T238)	\$ 21.00/test
2. Field Density Test – Drive Sleeve (4 min) (T204)	\$ 22.00/ test
3. Field Density Test – Sand Cone (4 min) (T191)	\$ 25.00/ test
4. Proctors (Standard or Modified T99 or T180)	\$ 85.00/ test
5. Florida Bearing Value Test (FBV)	\$ 45.00/test
6. Limerock Bearing Ratio Test (FM 5-515 LBR)	\$275.00/test
7. Carbonate Content Test (FM 5-514)	\$ 55.00/test
8. Organic Content Test (T267)	\$ 30.00/test
9. Natural Sample Moisture Content	\$ 15.00/test
10. Unit Weight and Moisture Content (undisturbed sample)	\$ 30.00/test
11. Permeability of Granular Soils Constant Head (T125)	\$170.00/test
12. Triaxial Tests (D4767)	\$385.00/point
13. Sieve Analysis of Aggregates (T27)	\$ 65.00/test
14. Particle Size Analysis of Soils (T88)	\$ 50.00/test
15. Hydrometer Analysis (D422)	\$ 80.00/test
16. Specific Gravity & Absorption of Fine or Coarse Aggregate	\$ 45.00/test
17. Double Ring Infiltration Test	\$400.00/test
18. Consolidation Testing of Undisturbed Sample (T216)	\$450.00/test
19. Unconfined Compressive Strength of Cohesive Soil (D2166)	\$ 45.00/test
20. Soil Corrosivity – pH Sulfate, Chloride, Resistivity	\$145.00/test
21. Liquid Limit (T89)	\$ 45.00/test
22. Plastic Limit (T90)	\$ 45.00/test
23. Percent Finer than the U.S. No. 200 Sieve (FM1-T011)	\$ 25.00/test
24. SFWMD Constant/Falling Head Permeability Tests	\$350.00/test

CONCRETE & MASONRY MATERIALS

1. Concrete Compression Test (4 min cylinders/trip) (T22)	\$ 80.00/set
--Prepare cylinders & slump test on-site	
2. Additional concrete cylinders	\$ 15.00/cylinder
3. Concrete Compression Test - only (delivered to lab)	\$ 15.00/cylinder
4. Flexural Strength Test (up to beams) (T97)	\$ 150.00/set
--Includes slump, molding (additional beams \$30/beam)	
5. Unit weight of fresh concrete (C138)	\$ 35.00/set
6. Technician time due to construction delays (i.e., on-site time in excess of 1 hr/set) and cylinder pickup/transport not in conjunction with other field work	\$ 45.00/hour
7. Continuous monitoring of concrete for slump, temperature and other such plastic property testing	\$ 45.00/hour
8. Additional Slump Test (T119)	\$ 15.00/test
9. Air Content Test (C173)	\$ 30.00/test
10. Grout Prism (four (4) per set) (ASTM C1019 using manufactured grout boxes)	\$ 75.00/set
--Includes preparation of prism on site	
11. 2" X 2" Mortar Cubes (six (6) per set) (T106)	\$ 55.00/set
--Includes preparation of cubes on site	
12. Additional Mortar Cubes	\$ 10.00/each
13. Masonry Units	
A. Compressive Strength	\$ 30.00/unit
B. Absorption and Strength (set of three (3))	\$125.00/set

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SAMPLING & TESTING OF HARDENED IN-PLACE CONCRETE

1.	Mobilization & usage of portable coring equipment*	
	- with power available (no generator req'd)	\$75.00/day
	- generator required	\$125.00/day
2.	Field coring of concrete – technician time (2 men may be req'd)	\$ 45.00/hour
3.	Trim, cap and compressive strength testing of cores (C42)	\$ 30.00/core
4.	Windsor Probe Test (set of 3 shots) (C803)	\$120.00/set
5.	Additional Windsor Probe Tests	\$ 80.00/test
6.	Swiss Hammer Testing (C805)	
	- equipment usage	\$ 35.00/day
	- technician time for performing testing	\$ 54.00/hour

*Does Not Include Maintenance of Traffic (MOT) set-up or costs

SAMPLING AND TESTING OF ASPHALTIC CONCRETE

1.	Mobilization & usage of portable coring equipment*	
	- with power available (no generator req'd)	\$75.00/day
	- generator required	\$125.00/day
2.	Field coring of in-place asphalt – technician time (2 men may be req'd)	\$ 45.00/hour
3.	Asphalt Extraction and Graduation (T164)	\$150.00/test
4.	Asphalt Density and Thickness (T166)	\$ 25.00/test

*Does Not Include Maintenance of Traffic (MOT) set-up or costs

INSPECTION SERVICES (Certified Inspector)

1.	Building Inspection	
	• Threshold or Steel Inspection [Structural – Welding/Bolt Torque]	\$ 65.00/hour
	• Mechanical, Electrical & Plumbing Inspections	\$ 85.00/hour
	• Plan Review	\$ 85.00/hour
2.	Specialist Inspector (on job site or plant)	\$ 65.00/hour
	• Concrete	
	• Asphalt	
	• Pile driving	
	• Pre-cast	
3.	Senior Engineering Technician	\$ 54.00/hour
4.	Engineering Technician	\$ 45.00/hour

ENGINEERING AND PROFESSIONAL SERVICES

1.	Principal Engineer (Florida Registered PE/Court Qualified Expert)	\$145.00/hour
2.	Senior Engineer (Florida Registered PE)	\$120.00/hour
3.	Project Engineer	\$ 95.00/hour
4.	Staff Engineer	\$ 75.00/hour
5.	Staff Scientist	\$ 65.00/hour
6.	CADD Technician	\$ 50.00/hour
7.	Administrative Assistant	\$ 42.00/hour

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ENVIRONMENTAL SITE ASSESSMENTS

1.	Phase I Environmental Site Assessments	
	- 0 to 2 acres	\$2,100.00/site
	- 2 to 10 acres	\$2,300.00/site
	- 10 to 25 acres	\$2,500.00/site
	- 25+ acres	by site specific quote
2.	Phase II Environmental Site Assessments	by site specific quote
3.	Use of Turbidity Meter	\$ 25.00/day
4.	Use of Water Level Indicator	\$ 15.00/day
5.	Use of Groundwater Sampling Equipment	\$ 50.00/day
6.	Analytical Laboratory Testing of Soil or Water	cost + 15%
7.	Steam Cleaner	\$ 175.00/day
8.	Disposal Equipment (bailers, filters, tubing, gloves, storage drums, etc.)	cost + 12%

FIELD EXPLORATIONS

1.	Mobilization of Truck Mounted Drilling Equipment to Project (min. charge)	\$250.00/trip
2.	Auger Borings/Hollow-Stem	\$ 9.00/lf
3.	Hand Augers w/Hand-Held Cone Penetrometer (readings per foot)	\$ 45.00/hour/technician
4.	Standard Penetration Tests – Truck Rig (T206)	
	• 0'-50'	\$ 12.00/lf
	• 51'-100'	\$ 13.00/lf
	• 101'-125'	\$ 15.00/lf
	• 126'-150'	\$ 18.00/lf
5.	Grout Bore Holes	
	• 0'-50'	\$ 3.00/lf
	• 51'-100'	\$ 4.00/lf
	• 101'-150'	\$ 6.00/lf
6.	Casing – F&I, Remove (Up To 4" ID)	
	• 0'-50'	\$ 5.00/lf
	• 51'-100'	\$ 6.00/lf
	• 101'-125'	\$ 10.00/lf
7.	Static Cone Penetration Test 0'-100'	\$ 10.50/lf
8.	Muck Probing (4 hour min.)	\$ 120.00/crew/hour
9.	Rock Coring – N or H Size	
	• 0'-50'	\$ 30.00/lf
	• 51'-100'	\$ 32.00/lf
	• 101'-125'	\$ 37.00/lf
10.	Shelby Tube Undisturbed Samples	\$100.00/each
11.	Fixed Piston Shelby, Osterberg, Pitcher Undisturbed Samples	\$135.00/each
12.	Shallow Temporary Piezometer (Non-Environmental)	
	• 0'-12'	\$ 20.00/lf
	• 12'-25'	\$ 30.00/lf
13.	Piezometer Locking Assembly & Pad	\$225.00/each
14.	Clear/Develop Piezometer Well	\$150.00/hour
15.	Groundwater Monitoring Wells 2" Diameter	
	• 0'-25'	\$ 30.00/lf
	• 26'-50'	\$ 40.00/lf
16.	Abandonment of up to 4" diameter wells (0 – 100')	\$ 20.00/lf

NOTE: A factor of 1.2 will be applied to the above drilling rates for the use of Dunkelberger's "Mud-bug" (ATV) drilling rig.

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Assumptions/Exemptions/Limitations/Exclusions:

1. Natural moisture content will be included at no charge when performed in conjunction with all other soil and aggregate testing services.
2. Sample pickup time for laboratory tests will be billed at \$45.00/hour unless performed in conjunction with other field testing services (in place density tests or concrete tests).
3. Engineering technician time spent on concrete testing services will be billed at \$45.00/hour for on-site, standby time in excess of one (1) hour per set, cylinder set pickup performed not in conjunction with other field testing services cancellation without notice.
4. Hourly rates are portal-to-portal.
5. An overtime factor of 1.3 will be applied to the attached rates for work performed on weekends, holidays, and outside the regular work week (7:30 a.m. to 5:00 p.m. Monday through Friday).
6. These fees do not include costs for Maintenance-Of-Traffic (MOT) and/or utility locations which may be required for certain jobs. These costs will be negotiated on an as-needed, case-by-case basis.
7. The Field Explorations costs are for land-based work using truck-mounted drilling equipment only. Sites requiring all-terrain drilling equipment, clearing, and water-based work will be quoted on a site specific basis.