



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## CITY COUNCIL AGENDA ITEM



Date: February 7, 2023

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
Dee Ann Irby, Controller  
G. Scott Finlay, City Engineer  
Emily Frontera, Purchasing Manager

Subject: Standard Purchasing Resolution 3: Exercise Renewal Option – Municipal Testing Services

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### History

Geotechnical testing services are used primarily by the Engineering Department for obtaining information on the physical properties of soils and for quality assurance testing of materials during construction projects. On a typical road reconstruction project, the testing consultant would do soil borings, make design recommendations and provide testing on a wide range of materials such as concrete, asphalt, sand and gravel. This testing provides the engineer with information to determine whether or not the materials provided by the contractor comply with construction specifications. Testing is an indispensable part of the quality control and quality assurance process that applies to all infrastructure projects.

Troy has been using Intertek PSI and Testing Engineers & Consultants (TEC) for testing services since 2006. Previously, TEC had provided testing services to Troy for more than 30 years. In 2006 our testing consultants were expanded to two with the addition of Intertek PSI. This move helped address a growing demand for testing services and assured that all anticipated testing services could be provided between the two consultants.

Both consultants are well qualified with experienced staffs ready to meet the City's needs on all types of infrastructure projects. We believe that the City benefits from a greater availability of all testing services, so that no matter our project load, our needs are always covered.

City Council awarded five-year contracts to both testing firms with an option to renew for an additional five years (Resolution #2018-03-027-J-4b) on March 5, 2018.

Over the last five (5) years, total expenditures for municipal testing services has been approximately \$308,000: PSI \$227,000 and TEC \$81,000. The services provided cover a wide variety, including soil borings, make design recommendations and provide testing on a wide range of materials such as concrete, asphalt, sand and gravel for construction associated with private development; and on city capital projects.



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### **Purchasing**

The City of Troy on January 16, 2018, issued a Request for Proposal (RFP-COT 18-09) for Professional Municipal Testing Services which resulted in a best value award and Professional Services Agreement to the top two ranked firms; Testing Engineers & Consultants (TEC) and Intertek PSI (PSI) (Resolution #2018-03-027-J-4b). The 5-year contract expires March 31, 2023 and includes an option to renew for an additional five (5) years. Both consultants were asked if they were willing to extend their contract for an additional five (5) years under the same terms and conditions. While both firms are interested in renewing; they are reluctant to do so at the current hourly rate schedule. As with other industries and the current economic situation, providing a competitive wage is a priority to recruiting and maintaining highly qualified employees.

A market survey was performed and the fee schedules requested are competitive and inline with current market rates. City Management is in mutual agreement with the proposed rate increases and 3% annual escalation as the City has benefited from 2018 rates for the past five (5) years. By renewing contracts with the current contracted testing consultants, the City will continue to benefit from continuity of service and exceptionally high level of engineering testing services on an as needed basis, meeting all the needs of the Engineering Department. The contracts, consultant performance and contract billing will continue to be monitored closely.

### **Financial**

The cost of geotechnical testing services is included in the capital budget for each infrastructure project. Funding for testing services on private developments comes from cash deposits for material and construction testing services in the amount of one and one-half (1½) percent of the estimated construction cost of public improvements. These deposits are part of the Private Agreements that are approved by City Council prior to the start of construction.

### **Recommendation**

City Management recommends exercising the five-year option to renew contracts for Municipal Testing Services with *Intertek PSI of Troy, MI* and *Testing Engineers & Consultants, Inc. (TEC) of Troy, MI*; under the same terms and conditions, and revised pricing schedules; contracts to expire March 31, 2028.



Testing Services

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## COST PROPOSAL

### FEE COMPUTATIONS: PROFESSIONAL MUNICIPAL TESTING SERVICES

#### ALL SUBMITTED PROPOSALS SHALL BE EVALUATED ON THE FOLLOWING PAYMENT ITEMS:

ESTIMATED QUANTITY (UNITS)	SERVICES	UNIT PRICE	TOTAL
25 Hours	Professional Engineer	\$ 125.00	\$ 3,125.00
250 Hours	Senior Engineering Technician	\$ 48.00	\$ 12,000.00
450 Miles	Mileage Charge (if any)	\$ 0.00	\$ 0.00
30 Hours	Senior Engineer Review	\$ 95.00	\$ 2,850.00
50 Hours	Field or Engineering Technician	\$ 48.00	\$ 2,400.00
40 Hours	Project Manager	\$ 120.00	\$ 4,800.00
ADDITIONAL REQUIRED SERVICES:			
	Geotechnical Engineer	\$ 95.00	
		\$	
		\$	
OPTIONAL /SERVICES ETC.:			
		\$	
		\$	
		\$	
FIELD TESTING			
40 Hours	Pick up samples	\$ 48.00	\$ 1,920.00
280 Miles	Mileage Charge (if any)	\$ 0.00	\$ 0.00
110 Hours	Nuclear Density Gauge	\$ 6.50	\$ 715.00
	Equipment Charge (if any)	\$	
240 Miles	Mileage Charge (if any)	\$ 0.00	\$ 0.00
940 Feet	Soil Borings (0'-25' typical)	\$ 22.50	\$ 21,150.00
	Mobilization Charge (if any)	\$ 450.00	
30 Hours	Concrete Field Test (slump, air, unit wt.)	\$ 48.00	\$ 1,140.00
15 Hours	Pavement Cores (concrete or bituminous)	\$ 95.00	\$ 1,425.00
ADDITIONAL REQUIRED SERVICES:			
		\$	
		\$	
		\$	
OPTIONAL/ SERVICES ETC.:			
		\$	
		\$	
		\$	

NOTE: IF MORE SPACE IS REQUIRED, ATTACH ADDITIONAL SHEETS IF NEEDED BUT USE THE FORMAT ESTABLISHED ABOVE.

INCLUDE PRICES FOR ADDITIONAL REQUIRED SERVICES THAT ARE NOT LISTED ABOVE SUCH AS ANY CLERICAL CHARGES, MOBILIZATION CHARGE, LABOR CHARGE, OR EQUIPMENT CHARGE, ETC. NOT SPECIFICALLY REQUESTED ABOVE BUT NECESSARY TO COMPLETE THE REQUIRED SERVICE. SERVICES WITH A MINIMUM CHARGE ALSO NEED TO BE NOTED AS SUCH.

COMPANY NAME: Intertek - PSI

COST PROPOSAL – continued

LAB ANALYSIS	SERVICES	UNIT PRICE	TOTAL
240 Each	Concrete Cylinders	\$ 15.00	\$ 3,600.00
30 Each	Proctor Test (moisture density)	\$ 185.00	\$ 5,550.00
20 Each	Sieve Analysis	\$ 100.00	\$ 2,000.00
50 Each	Extractions (bituminous)	\$ 205.00	\$ 10,250.00
ADDITIONAL REQUIRED SERVICES:			
	Moisture/Visual Classification of SPT Samples	\$ 10.00	
	Atterberg Limits	\$ 150.00	
	Particle Size Limits (Hydrometer < 200 Sieve)	180.00	
	Organic Content	\$ 30.00	
OPTIONAL/ SERVICES:			
		\$	
		\$	
<b>PRE-DEMOLITION HAZARDOUS MATERIAL SURVEY WORK:</b>			
20 Each	Asbestos	\$ 18.00	\$ 360.00
20 Each	Lead Based Paint	\$ 20.00	\$ 400.00
5 Each	Presence of PCB's	\$ 80.00	\$ 400.00
5 Each	Presence of Mercury	\$ 15.00	\$ 75.00
50 Hours	Air Quality Monitoring in accordance With Asbestos Abatement Activities	\$ 55.00	\$ 2,750.00
ADDITIONAL REQUIRED SERVICES:			
		\$	
		\$	
		\$	
OPTIONAL/ SERVICES:			
		\$	
		\$	
		\$	

OVERTIME RATES: PRICE = 1.5 FACTOR X RATE SHOWN ABOVE  
(i.e. 1.50)

Overtime rates shall be defined as all non-holiday Saturdays, and weekdays before 8a.m. or after 5 p.m.

SUNDAY RATES: PRICE = 2.0 FACTOR X RATE SHOWN ABOVE  
(i.e. 2.0)

Sunday rates shall be defined as all Sundays that are not classified as a holiday.

HOLIDAY RATES: PRICE = 2.0 FACTOR X RATE SHOWN ABOVE  
(i.e. 3.0)

Holiday rates shall be paid on New Year's Day, Good Friday, Easter, Memorial Day, July 4<sup>th</sup>, Labor Day, Thanksgiving Day, and Christmas Day.

ESTIMATED QUANTITIES: Quantities stated are good-faith estimates and are included for award purposes. The City of Troy will not be penalized for ordering more or less work than the estimates shown above.

UNIT PRICES: Unit prices prevail. The City of Troy Purchasing Department will correct all extension errors.

COMPANY NAME: Intertek - PSI  
Pricing subject to annual 3% escalator

Testing Engineers & Consultants, Inc. 2023 UNIT RATES			
A. CONSTRUCTION SERVICES		2023 RATES*	2018 RATES
1.0 TECHNICAL, ENGINEERING AND CONSULTING SERVICES			
1.1 Field or Engineering Technician	Hour	\$48.00	\$33.00
1.2 Senior Engineering Technician (Soils, Concrete, Bituminous)	Hour	\$54.00	\$38.00
1.3 Project Manager	Hour	\$115.00	\$80.00
1.4 Senior Engineer	Hour	\$115.00	\$85.00
1.5 Professional Engineer	Hour	\$125.00	\$90.00
1.6 Coring Crew	Hour	\$125.00	\$100.00
2.0 LABORATORY SERVICES			
2.1 Aggregate			
a. Moisture Density Relationship, (Proctor)	Each	\$95.00	\$50.00
b. Sieve Analysis	Each	\$55.00	\$30.00
2.2 Bituminous			
a. Extraction (Percent Asphalt)	Each	\$155.00	\$80.00
b. Sieve Analysis	Each	\$55.00	\$30.00
c. Bulk Density of the Mix (unit weight)	Each	\$65.00	\$45.00
2.3 Concrete			
a. Compressive Strength	Each	\$16.00	\$12.00
2.4 Masonry			
a. Grout Specimen: Compressive Strength	Each	\$18.00	\$18.00
b. Masonry Unit:			
1. Absorption & Unit Weight	Each	\$75.00	\$50.00
2. Compressive Strength	Each	\$50.00	\$40.00
c. Mortar Cubes: Compressive Strength	Each	\$18.00	\$18.00
2.5 Fireproofing			
a. Fireproofing Density	Each	\$50.00	\$50.00
3.0 EQUIPMENT AVAILABLE IN CONJUNCTION WITH TEC PERSONNEL			
3.1 Soils/Bituminous Concrete Nuclear Density Gauge	Hour	\$6.00	\$5.00
B. GEOTECHNICAL SERVICES			
1.0. DRILLING			
1.1 Mobilization and moving of drilling equipment on and off site			
a. Per Mile		\$4.50	\$3.15
b. Per Day (Minimum)		\$450.00	\$300.00
1.2 ATV Charge		\$450.00	\$315.00
1.3 Boring Layout	Hour	\$110.00	\$90.00
1.4 Soil sampling using either split-barrel sampler (ASTM D1586) or liner sampler (ASTM D1587) at 2 1/2 foot intervals to 10 feet, and 5 foot thereafter			
a. 0' - 25'	Foot	\$17.00	\$11.50
b. 26' - 50'	Foot	\$19.00	\$14.00
c. 51' - 75'	Foot	\$22.00	\$16.00
d. 76' - 100'	Foot	\$26.00	\$19.00
e. 100+'	Quoted Upon Request		
An additional charge of \$1.00 per foot will be made for soils with more than 50 blows per foot or 4.5 tsf qu or strata containing boulders, slag, building rubble or broken concrete.			
1.5 Additional Split-Spoon Sampling			
a. 0' - 50'	Each	\$20.00	\$14.00
b. 50' - 100'	Each	\$30.00	\$18.00
1.6 Rock Coring			
a. \$150.00 set up per hole, plus	Foot	\$70.00	\$50.00
1.7 Auger-drilling with profile sampling	Foot	\$15.00	\$10.50
1.8 Cost of special equipment or permit for moving drilling equipment about the site	At Cost Plus 15%		
1.9 Set up time per hole or time required to move between boring locations in excess of 1/2 hour or stand	Hour	\$215.00	\$180.00
1.1 Thin wall (Shelby) tubes	Each	\$70.00	\$50.00
1.2 Drilling through concrete or asphalt	Inch	\$14.00	\$13.00
2.0 LABORATORY TESTING			

2.1	Atterberg Limits Determination (LL and PL)	Each	\$100.00	\$85.00
2.2	Hydrometer & Sieve Analysis (Combined)	Each	\$210.00	\$150.00
2.3	Loss on Ignition (Organic Content)	Each	\$65.00	\$50.00
2.4	Sieve Analysis	Each	\$85.00	\$50.00
2.5	Specific Gravity Determination	Each	\$85.00	\$50.00
2.6	Standard Series (Moisture, Density, Rimac Unconfined)	Each	\$13.00	\$11.00
2.7	Unconfined Compression Test (Split-spoon or Liner	Each	\$35.00	\$ 25.00
2.8	Unconfined Compression Test (Undisturbed Tube	Each	\$110.00	\$ 90.00
2.9	Permeability Test (Falling Head)	Each	\$250.00	\$ 210.00
2.10	Permeability Test (Sample Prep)	Hour	\$70.00	\$ 55.00
3.0. GEOTECHNICAL ENGINEERING				
Professional and technical services for field supervision, analysis of test data, and engineering recommendations				
1.	Senior Engineer	Hour	\$115.00	
2.	Project Management/ Coordination	Hour	\$115.00	
3.	Geotechnical Engineer/Professional Engineer	Hour	\$125.00	\$90.00
4.0 REMARKS				
1. Rate for advanced laboratory testing will be quoted upon request.				
2. Services and fees not listed above, such as the installation of groundwater monitoring wells, will be quoted upon request.				
C. INDUSTRIAL HYGIENE				
1.	Asbestos Sample Analysis (3 day TAT)	Each	\$19.00	
2. Asbestos Air Sample Analysis PCM (Included in Hourly Rate)				
3.	Transmission Electron Microscopy (1 day TAT)	Each	\$150.00	
4.	Lead Paint Sample Analysis	Each	\$30.00	
5. Specialized Air Quality Testing quoted on a per project basis				
6. Asbestos and Lead Paint Building Survey quoted on a per project basis				
7. Asbestos Removal Bid Specification quoted on a per project basis				
8.	Field Technician	Hour	\$65.00	
9.	Senior Project Manager	Hour	\$90.00	
10.	Certified Industrial Hygienist	Hour	\$135.00	\$110.00
D. ENVIRONMENTAL SERVICES				
1.0 PERSONNEL				
1.1	Professional Engineer	Hour	\$125.00	\$115.00
1.2	Certified UST Professional (CP)	Hour	\$125.00	\$115.00
1.3	Senior Geologist/Engineer	Hour	\$115.00	\$95.00
1.4	Project Geologist/Engineer	Hour	\$105.00	\$95.00
1.5	Senior Environmental Scientist	Hour	\$95.00	\$90.00
1.6	Staff Geologist/Engineer	Hour	\$95.00	\$85.00
1.7	Staff Environmental Scientist	Hour	\$90.00	\$80.00
1.8	Environmental Technician	Hour	\$60.00	\$50.00
1.9	Principal Consultant	Hour	\$165.00	\$150.00
1.10	CAD/Drafting	Hour	\$65.00	\$50.00
2.0 FIELD EQUIPMENT				
2.1	Photoionization Detector (PID)	Day	\$125.00	\$100.00
2.2	Soil/Groundwater Sampling Supplies/Equipment	Day	\$220.00	\$200.00
2.3	Methanol Prep Kits	Each	\$15.00	\$10.00
2.4	Groundwater Field Filters	Each	\$30.00	\$23.00
2.5	Geophysical Investigations (Ground Penetrating Radar, EM, etc.)	Day	\$250.00	\$200.00
2.6	Operator and Equipment	Hour	\$225.00	\$175.00
2.7	Vehicle Use (on Site)	Day	\$50.00	\$50.00
3.0 LABORATORY ANALYSIS				
3.1	Chemical Laboratory Analysis	Each	Cost +10%	

\* Pricing subject to 3% annual escalation