

Materials Testing and Construction Inspection Services
South Division Fire Station Project

Name of Testing Agency Prime Consulting Inc

Unit Cost/ Fee Schedule

SOILS:

Field Inspection Rates

	Half Day	Full Day
	\$250	\$500

Services include but are not limited to: Inspections, recording and reporting of visual inspection of soils placement and lift thickness, compaction/soils density testing (using nuclear methods) of fill, and soil sampling by sieve and proctor testing, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Washed Sieve Analysis	Modified Proctor Test & Curve	Hydrometer Test	Ash Burn Walkley/Black Test	Chemical Analysis	Pick up & Delivery Rates
\$100	\$100	\$100	\$100	\$50	\$220

ASPHALT:

Field Inspection Rates

	Half Day	Full Day
	\$220	\$440

Services include but are not limited to: Inspection of base and binder courses, thickness, temperature, compaction testing and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Asphalt Content	Aggregate Gradation
\$250	\$100

CONCRETE:

Reinforcing Steel Inspection Rates

	Half Day	Full Day
	\$200	\$300

Services include but are not limited to: Inspections, recording and reporting of installations of reinforcing steel, welded steel, and anchor rods, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

CONCRETE continued:

PRIME CONSULTING

Materials Testing and Construction Inspection Services
South Division Fire Station Project

Concrete Field Inspection Rates and description of included service.

	Half Day	Full Day
	\$220	\$440

Services include but are not limited to: Inspections, recording and reporting of all concrete testing, plant inspection, truck delivery timing and slip collection, materials certifications, test cylinder fabrication, and continuous inspection of poured-in-place concrete for conveyance, placement, consolidation and finishing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Concrete Cylinder Testing – Lab Rates

Size of Cylinder	Composite Sample – Min. Quantity of Cylinders, including reports	Flat Rate for additional composite sample, including reports	Pick up and Delivery Rates	Additional Reports	Additional Cylinder
4"x8"	1	\$25	\$220	\$0	\$25

Services include but are not limited to: Testing, recording and reporting of all concrete cylinder testing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals. Pickup and delivery of Composite Sample cylinders included in unit rate.

MASONRY:

Masonry Placement Inspection

	Half Day	Full Day
	\$220	\$440

Services include but are not limited to: Testing, recording and reporting on inspection of complete masonry systems including grout and mortar mixing, masonry unit installations and associated reinforcing, anchors and ties; mortar cube fabrication, grout prism fabrication, review of materials certificates for compliance, and inspection of weather protection, all in conformance of Project drawings and Specifications, and all applicable shop drawings and submittals.

Compression Tests – Lab Rates

Quantity of Cubes	Mortar Cube Test	CMU Test	Masonry Prism Test	Grout Prism Test	Pick Up and Delivery Rates
1	\$25	\$25	\$25	\$25	\$200

STRUCTURAL STEEL/COLD FORM STEEL FRAMING:

Structural Steel and Cold Form Steel Framing Field Inspector Rates

Hourly	Half Day	Full Day	One Week	One Month	Overtime
\$75	\$300	\$580	\$2900	\$12,760	\$112.5

Services include but are not limited to: Testing, recording and reporting on materials mill test certifications, visual inspections and physical verification of field (pre and post heat) welded and bolted connections, all non-destructive testing and inspections, and inspections for all shear connections, moment connections, metal decking, metal stair framing, and all related structural connection details, for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

PRIME
CONSULTING

Materials Testing and Construction Inspection Services
South Division Fire Station Project
Ultrasonic & Magnetic Particle Testing Rates

Ultrasonic *	Magnetic Particles *	*Half day Rate
\$800	\$600	

FIREPROOFING:

Field Inspection rates

	Half Day	Full Day
	\$400	\$800

Services include but are not limited to: Testing, recording and reporting on Inspection of fireproofing installation, material thickness, adhesion, cohesion and density, and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

COMBINATION RATES:

	Half Day *	Full Day *
	\$220	\$440

*applies to concrete, masonry, rebar and asphalt. Remaining inspections require special training and experience

Services include but are not limited to: Combination rates for one technician to perform Soils, Asphalt, Concrete, Masonry, Reinforcing steel, light gauge steel, thermal and moisture protections, fire stops and protective coatings, and other accompanying field inspections and testing.

Project Management and all incidental expenses shall be included in the individual wage rates submitted herein, and not be billed separately.

City of Worcester
South Division Fire Station Project
Material Testing Proposal Matrix
March 2026

1 CONCRETE

- a. Cylinders Required per set: 4
Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- b. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- c. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- d. Reinforcing Steel Inspections - Half Day
- e. Reinforcing Steel Inspections - Full Day

# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
30	Per set	\$100	\$3,000
20	Half Days	\$220	\$4,400
10	Full Days	\$440	\$4,400
15	Half Days	\$220	\$3,300
5	Full Days	\$300	\$1,500

PRIME CONSULTING

Materials Testing and Construction Inspection Services
South Division Fire Station Project

2 SOILS & AGGREGATES

- a. Soil Inspection – Half Day
- b. Soil Inspection – Full Day
- c. Gradation Analysis
- d. Modified Proctor Test

# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
20	Half Days	\$250	\$5,000
10	Full Days	\$500	\$5,000
5	Each	\$100	\$500
5	Each	\$100	\$500

3 STRUCTURAL STEEL Per ASTM or as indicated

- a. Shop inspection of fabrication
- b. Inspection of structural steel-plumb and level, bolts
- c. Inspection of structural steel-plumb and level, bolts

1	Half Days	\$250	\$250
20	Half Days	\$300	\$6,000
10	Full Days	\$580	\$5,800

4 MORTAR/GROUT Per ASTM Standards

- a. Form mortar/grout cubes for compressive strength.
- b. Laboratory pick-up of mortar/grout cubes, test and report results.

3	Half Days	\$220	\$660
3	Each	\$200	\$600

5 COMBINATION RATES

- a. Half Day
- b. Full Day

30	Half Days	\$220	\$6,600
10	Full Days	\$440	\$4,400

6 ASPHALT PAVING PER ASTM Standards

- a. Half Day
- b. Full Day

4	Half Days	\$220	\$880
4	Full Days	\$100	\$400

7 SPECIAL INSPECTION SERVICES

- a. Field Technician for Special Inspection.
- b. Professional Engineer for Special Inspections.

1	Half Days	\$600	\$600
1	Half Days	\$800	\$800

Total Estimated Cost

\$ \$54,590.00 *

*low bid shall be based on this total estimated cost

PRIME
CONSULTING

Provide the following as attachments to Sealed Bid:

- The name, owner and location of the laboratory that will be utilized on this project, the relevant certifications of the laboratory and its technicians, and the normal and expedited turnaround times for all applicable test results, equal to or less than the turnaround required by the Contract Documents.
- Evidence of all insurance coverages currently carried by the firm.
- Evidence of the firms experience and capability to conduct the testing and inspections indicated, as documented by ASTM E 548, and specializing in the types of testing and inspections to be performed.
- All inspection personnel must have a minimum of three (3) years of experience in construction inspection and test sample taking. Evidence of personnel experience must be provided in the sealed bid.

Materials Testing and Construction Inspection Services
South Division Fire Station Project

Name of Testing Agency Yankee Engineering & Testing, Inc.

Unit Cost/ Fee Schedule

SOILS:

Field Inspection Rates

	Half Day	Full Day
	210.00	375.00

Services include but are not limited to: Inspections, recording and reporting of visual inspection of soils placement and lift thickness, compaction/soils density testing (using nuclear methods) of fill, and soil sampling by sieve and proctor testing, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Washed Sieve Analysis	Modified Proctor Test & Curve	Hydrometer Test	Ash Burn Walkley/Black Test	Chemical Analysis	Pick up & Delivery Rates
110.00	125.00	100.00	65.00	-----	60.00

ASPHALT:

Field Inspection Rates

	Half Day	Full Day
	210.00	375.00

Services include but are not limited to: Inspection of base and binder courses, thickness, temperature, compaction testing and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Asphalt Content	Aggregate Gradation
25.00	175.00

CONCRETE:

Reinforcing Steel Inspection Rates

	Half Day	Full Day
	210.00	375.00

Services include but are not limited to: Inspections, recording and reporting of installations of reinforcing steel, welded steel, and anchor rods, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

CONCRETE continued:

Y/ANKEE

Materials Testing and Construction Inspection Services
South Division Fire Station Project

Concrete Field Inspection Rates and description of included service.

	Half Day	Full Day
	210.00	375.00

Services include but are not limited to: Inspections, recording and reporting of all concrete testing, plant inspection, truck delivery timing and slip collection, materials certifications, test cylinder fabrication, and continuous inspection of poured-in-place concrete for conveyance, placement, consolidation and finishing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Concrete Cylinder Testing – Lab Rates

Size of Cylinder	Composite Sample – Min. Quantity of Cylinders, including reports	Flat Rate for additional composite sample, including reports	Pick up and Delivery Rates	Additional Reports	Additional Cylinder
4 X 8	4	60.00	60.00	0	15.00

Services include but are not limited to: Testing, recording and reporting of all concrete cylinder testing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals. Pickup and delivery of Composite Sample cylinders included in unit rate.

MASONRY:

Masonry Placement Inspection

	Half Day	Full Day
	210.00	375.00

Services include but are not limited to: Testing, recording and reporting on inspection of complete masonry systems including grout and mortar mixing, masonry unit installations and associated reinforcing, anchors and ties; mortar cube fabrication, grout prism fabrication, review of materials certificates for compliance, and inspection of weather protection, all in conformance of Project drawings and Specifications, and all applicable shop drawings and submittals.

Compression Tests – Lab Rates

Quantity of Cubes	Mortar Cube Test	CMU Test	Masonry Prism Test	Grout Prism Test	Pick Up and Delivery Rates
3	75.00	150.00	250.00	15.00	60.00

STRUCTURAL STEEL/COLD FORM STEEL FRAMING:

Structural Steel and Cold Form Steel Framing Field Inspector Rates

Hourly	Half Day	Full Day	One Week	One Month	Overtime
n/a	550.00	850.00	n/a	n/a	

Services include but are not limited to: Testing, recording and reporting on materials mill test certifications, visual inspections and physical verification of field (pre and post heat) welded and bolted connections, all non-destructive testing and inspections, and inspections for all shear connections, moment connections, metal decking, metal stair framing, and all related structural connection details, for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

YANKLEE

Materials Testing and Construction Inspection Services
South Division Fire Station Project
Ultrasonic & Magnetic Particle Testing Rates

Ultrasonic	Magnetic Particles
25.00/test	25.00/test

FIREPROOFING:

Field Inspection rates

	Half Day	Full Day
	210.00	375.00

Services include but are not limited to: Testing, recording and reporting on Inspection of fireproofing installation, material thickness, adhesion, cohesion and density, and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

COMBINATION RATES:

	Half Day	Full Day
	210.00	375.00

Services include but are not limited to: Combination rates for one technician to perform Soils, Asphalt, Concrete, Masonry, Reinforcing steel, light gauge steel, thermal and moisture protections, fire stops and protective coatings, and other accompanying field inspections and testing. **Does not include firestopping**

Project Management and all incidental expenses shall be included in the individual wage rates submitted herein, and not be billed separately.

City of Worcester
South Division Fire Station Project
Material Testing Proposal Matrix
March 2026

1 CONCRETE

- a. Cylinders Required per set: 4
- b. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- c. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- d. Reinforcing Steel Inspections - Half Day
- e. Reinforcing Steel Inspections - Full Day

# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
30	Per set	60.00	1,800.00
20	Half Days	210.00	4,200.00
10	Full Days	375.00	3,750.00
15	Half Days	210.00	3,150.00
5	Full Days	375.00	1,875.00

YANKEE

Materials Testing and Construction Inspection Services
South Division Fire Station Project

2 SOILS & AGGREGATES

- a. Soil Inspection – Half Day
- b. Soil Inspection – Full Day
- c. Gradation Analysis
- d. Modified Proctor Test

# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
20	Half Days	210.00	4,200.00
10	Full Days	375.00	3,750.00
5	Each	110.00	550.00
5	Each	125.00	625.00

3 STRUCTURAL STEEL Per ASTM or as indicated

- a. Shop inspection of fabrication
- b. Inspection of structural steel-plumb and level, bolts
- c. Inspection of structural steel-plumb and level, bolts

1	Half Days	900.00	900.00
20	Half Days	550.00	11,000.00
10	Full Days	850.00	8,500.00

4 MORTAR/GROUT Per ASTM Standards

- a. Form mortar/grout cubes for compressive strength.
- b. Laboratory pick-up of mortar/grout cubes, test and report results.

3	Half Days	210.00	630.00
3	Each	60.00	180.00

5 COMBINATION RATES (Not Steel)

- a. Half Day
- b. Full Day

30	Half Days	210.00	6,300.00
10	Full Days	375.00	3,750.00

6 ASPHALT PAVING PER ASTM Standards

- a. Half Day
- b. Full Day

4	Half Days	210.00	840.00
4	Full Days	375.00	1,500.00

7 SPECIAL INSPECTION SERVICES

- a. Field Technician for Special Inspection.
- b. Professional Engineer for Special Inspections.

1	Half Days	340.00	340.00
1	Half Days	600.00	600.00

Total Estimated Cost

\$ 58,440.00 *

*low bid shall be based on this total estimated cost

Notes:
 There is a 1.5x multiplier for OT / Nights / Saturdays / Sundays / Holidays.
 All hourly visits are subject to 4 hour minimum.

Provide the following as attachments to Sealed Bid:

- The name, owner and location of the laboratory that will be utilized on this project, the relevant certifications of the laboratory and its technicians, and the normal and expedited turnaround times for all applicable test results, equal to or less than the turnaround required by the Contract Documents.
- Evidence of all insurance coverages currently carried by the firm.
- Evidence of the firms experience and capability to conduct the testing and inspections indicated, as documented by ASTM E 548, and specializing in the types of testing and inspections to be performed.
- All inspection personnel must have a minimum of three (3) years of experience in construction inspection and test sample taking. Evidence of personnel experience must be provided in the sealed bid.

YANKEE

Materials Testing and Construction Inspection Services
South Division Fire Station Project

Name of Testing Agency The Thompson & Lichtner Co., Inc

Unit Cost/ Fee Schedule

SOILS:

Field Inspection Rates

	Half Day	Full Day
	\$332	\$572

Services include but are not limited to: Inspections, recording and reporting of visual inspection of soils placement and lift thickness, compaction/soils density testing (using nuclear methods) of fill, and soil sampling by sieve and proctor testing, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Washed Sieve Analysis	Modified Proctor Test & Curve	Hydrometer Test	Ash Burn Walkley/Black Test	Chemical Analysis	Pick up & Delivery Rates
\$110	\$120	\$120	\$135	\$250	\$150

ASPHALT:

Field Inspection Rates

	Half Day	Full Day
	\$531	\$831

Services include but are not limited to: Inspection of base and binder courses, thickness, temperature, compaction testing and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Asphalt Content	Aggregate Gradation
\$175	\$110

CONCRETE:

Reinforcing Steel Inspection Rates

	Half Day	Full Day
	\$324	\$556

Services include but are not limited to: Inspections, recording and reporting of installations of reinforcing steel, welded steel, and anchor rods, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

CONCRETE continued:

THE THOMPSON & LICHTNER CO. INC.

Materials Testing and Construction Inspection Services
South Division Fire Station Project

Concrete Field Inspection Rates and description of included service.

	Half Day	Full Day
	\$324	\$556

Services include but are not limited to: Inspections, recording and reporting of all concrete testing, plant inspection, truck delivery timing and slip collection, materials certifications, test cylinder fabrication, and continuous inspection of poured-in-place concrete for conveyance, placement, consolidation and finishing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Concrete Cylinder Testing – Lab Rates

Size of Cylinder	Composite Sample – Min. Quantity of Cylinders, including reports	Flat Rate for additional composite sample, including reports	Pick up and Delivery Rates	Additional Reports	Additional Cylinder
4 * 8	\$90/ set of 4	\$22.5	\$150	\$100	\$22.5

Services include but are not limited to: Testing, recording and reporting of all concrete cylinder testing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals. Pickup and delivery of Composite Sample cylinders included in unit rate.

MASONRY:

Masonry Placement Inspection

	Half Day	Full Day
	\$328	\$564

Services include but are not limited to: Testing, recording and reporting on inspection of complete masonry systems including grout and mortar mixing, masonry unit installations and associated reinforcing, anchors and ties; mortar cube fabrication, grout prism fabrication, review of materials certificates for compliance, and inspection of weather protection, all in conformance of Project drawings and Specifications, and all applicable shop drawings and submittals.

Compression Tests – Lab Rates

Quantity of Cubes	Mortar Cube Test	CMU Test	Masonry Prism Test	Grout Prism Test	Pick Up and Delivery Rates
	\$22.5	\$35	\$70	\$70	\$150

STRUCTURAL STEEL/COLD FORM STEEL FRAMING:

Structural Steel and Cold Form Steel Framing Field Inspector Rates

Hourly	Half Day	Full Day	One Week	One Month	Overtime
\$85	\$372	\$652	3,260	13,040	*1.5

Services include but are not limited to: Testing, recording and reporting on materials mill test certifications, visual inspections and physical verification of field (pre and post heat) welded and bolted connections, all non-destructive testing and inspections, and inspections for all shear connections, moment connections, metal decking, metal stair framing, and all related structural connection details, for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

THE THOMPSON & KHTNER CO. INC.

Materials Testing and Construction Inspection Services
South Division Fire Station Project
Ultrasonic & Magnetic Particle Testing Rates

Ultrasonic	Magnetic Particles
\$432/ half day	\$432/ half day

FIREPROOFING:

Field Inspection rates

	Half Day	Full Day
	\$352	\$612

Services include but are not limited to: Testing, recording and reporting on inspection of fireproofing installation, material thickness, adhesion, cohesion and density, and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

COMBINATION RATES:

	Half Day	Full Day
	\$352	\$612

Services include but are not limited to: Combination rates for one technician to perform Soils, Asphalt, Concrete, Masonry, Reinforcing steel, light gauge steel, thermal and moisture protections, fire stops and protective coatings, and other accompanying field inspections and testing.

Project Management and all incidental expenses shall be included in the individual wage rates submitted herein, and not be billed separately.

City of Worcester
South Division Fire Station Project
Material Testing Proposal Matrix
March 2026

1 CONCRETE

- a. Cylinders Required per set: 4
- b. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- c. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- d. Reinforcing Steel Inspections - Half Day
- e. Reinforcing Steel Inspections - Full Day

# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
30	Per set	90	2700
20	Half Days	324	6480
10	Full Days	556	5560
15	Half Days	324	4860
5	Full Days	556	2780

THE THOMPSON & LICHTNER CO. INC

Materials Testing and Construction Inspection Services
South Division Fire Station Project

2 SOILS & AGGREGATES

- a. Soil Inspection – Half Day
- b. Soil Inspection – Full Day
- c. Gradation Analysis
- d. Modified Proctor Test

# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
20	Half Days	332	6640
10	Full Days	572	5720
5	Each	110	550
5	Each	120	600

3 STRUCTURAL STEEL Per ASTM or as indicated

- a. Shop inspection of fabrication
- b. Inspection of structural steel-plumb and level, bolts
- c. Inspection of structural steel-plumb and level, bolts

1	Half Days	372	372
20	Half Days	372	7440
10	Full Days	652	6520

4 MORTAR/GROUT Per ASTM Standards

- a. Form mortar/grout cubes for compressive strength.
- b. Laboratory pick-up of mortar/grout cubes, test and report results.

3	Half Days	328	984
3	Each	150	450

5 COMBINATION RATES

- a. Half Day
- b. Full Day

30	Half Days	352	10560
10	Full Days	612	6120

6 ASPHALT PAVING PER ASTM Standards

- a. Half Day
- b. Full Day

4	Half Days	328	1312
4	Full Days	564	2256

7 SPECIAL INSPECTION SERVICES

- a. Field Technician for Special Inspection.
- b. Professional Engineer for Special Inspections.

1	Half Days	352	352
1	Half Days	800	800

Total Estimated Cost

\$ 73,056 *

*low bid shall be based on this total estimated cost

Provide the following as attachments to Sealed Bid:

- The name, owner and location of the laboratory that will be utilized on this project, the relevant certifications of the laboratory and its technicians, and the normal and expedited turnaround times for all applicable test results, equal to or less than the turnaround required by the Contract Documents.
- Evidence of all insurance coverages currently carried by the firm.
- Evidence of the firms experience and capability to conduct the testing and inspections indicated, as documented by ASTM E 548, and specializing in the types of testing and inspections to be performed.
- All inspection personnel must have a minimum of three (3) years of experience in construction inspection and test sample taking. Evidence of personnel experience must be provided in the sealed bid.

THE THOMPSON & LICHTNER CO, INC

FEE SCHEDULE

Materials Testing and Construction Inspection Services South Division Fire Station Project

Name of Testing Agency LiRo Engineers

Unit Cost/ Fee Schedule

SOILS:

Field Inspection Rates

	Half Day	Full Day
	\$340	\$680

Services include but are not limited to: Inspections, recording and reporting of visual inspection of soils placement and lift thickness, compaction/soils density testing (using nuclear methods) of fill, and soil sampling by sieve and proctor testing, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Washed Sieve Analysis	Modified Proctor Test & Curve	Hydrometer Test	Ash Burn Walkley/Black Test	Chemical Analysis	Pick up & Delivery Rates
\$125	\$150	\$175			\$150

ASPHALT:

Field Inspection Rates

	Half Day	Full Day
	\$360	\$720

Services include but are not limited to: Inspection of base and binder courses, thickness, temperature, compaction testing and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Asphalt Content	Aggregate Gradation
\$215	\$115

CONCRETE:

Reinforcing Steel Inspection Rates

	Half Day	Full Day
	\$360	\$720

Services include but are not limited to: Inspections, recording and reporting of installations of reinforcing steel, welded steel, and anchor rods, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.



LIRO
ENGINEERS

FEE SCHEDULE

Materials Testing and Construction Inspection Services South Division Fire Station Project

Concrete Field Inspection Rates and description of included service.

	Half Day	Full Day
	\$360	\$720

Services include but are not limited to: Inspections, recording and reporting of all concrete testing, plant inspection, truck delivery timing and slip collection, materials certifications, test cylinder fabrication, and continuous inspection of poured-in-place concrete for conveyance, placement, consolidation and finishing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Concrete Cylinder Testing – Lab Rates

Size of Cylinder	Composite Sample – Min. Quantity of Cylinders, including reports	Flat Rate for additional composite sample, including reports	Pick up and Delivery Rates	Additional Reports	Additional Cylinder
4x8	5	N/A	\$150	N/A	\$20

Services include but are not limited to: Testing, recording and reporting of all concrete cylinder testing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals. Pickup and delivery of Composite Sample cylinders included in unit rate.

MASONRY:

Masonry Placement Inspection

	Half Day	Full Day
	\$360	\$720

Services include but are not limited to: Testing, recording and reporting on inspection of complete masonry systems including grout and mortar mixing, masonry unit installations and associated reinforcing, anchors and ties; mortar cube fabrication, grout prism fabrication, review of materials certificates for compliance, and inspection of weather protection, all in conformance of Project drawings and Specifications, and all applicable shop drawings and submittals.

Compression Tests – Lab Rates

Quantity of Cubes	Mortar Cube Test	CMU Test	Masonry Prism Test	Grout Prism Test	Pick Up and Delivery Rates
6	\$20		\$25	\$25	\$150

STRUCTURAL STEEL/COLD FORM STEEL FRAMING:

Structural Steel and Cold Form Steel Framing Field Inspector Rates

Hourly	Half Day	Full Day	One Week	One Month	Overtime
\$125	\$500	\$1000	\$5000		1.5 times

Services include but are not limited to: Testing, recording and reporting on materials mill test certifications, visual inspections and physical verification of field (pre and post heat) welded and bolted connections, all non-destructive testing and inspections,

LIRI ENGINEERS



FEE SCHEDULE

Materials Testing and Construction Inspection Services
South Division Fire Station Project
Ultrasonic & Magnetic Particle Testing Rates

Ultrasonic	Magnetic Particles
\$1080/Day	\$1080/Day

FIREPROOFING:

Field Inspection rates

	Half Day	Full Day
	\$540	\$1080

Services include but are not limited to: Testing, recording and reporting on inspection of fireproofing installation, material thickness, adhesion, cohesion and density, and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

COMBINATION RATES:

	Half Day	Full Day
	\$580	\$1160

Services include but are not limited to: Combination rates for one technician to perform Soils, Asphalt, Concrete, Masonry, Reinforcing steel, light gauge steel, thermal and moisture protections, fire stops and protective coatings, and other accompanying field inspections and testing.

Project Management and all incidental expenses shall be included in the individual wage rates submitted herein, and not be billed separately.

City of Worcester
South Division Fire Station Project
Material Testing Proposal Matrix
March 2026

1 CONCRETE

- a. Cylinders Required per set: 4
- b. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- c. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- d. Reinforcing Steel Inspections - Half Day
- e. Reinforcing Steel Inspections - Full Day

# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
30	Per set	\$80	\$2,400
20	Half Days	\$360	\$7,200
10	Full Days	\$720	\$7,200
15	Half Days	\$360	\$5,400
5	Full Days	\$720	\$3,600

LIRO ENGINEERS

FEE SCHEDULE

Materials Testing and Construction Inspection Services South Division Fire Station Project

	# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
2 SOILS & AGGREGATES				
a. Soil Inspection – Half Day	20	Half Days	\$340	\$6,800
b. Soil Inspection – Full Day	10	Full Days	\$680	\$6,800
c. Gradation Analysis	5	Each	\$125	\$625
d. Modified Proctor Test	5	Each	\$150	\$750
3 STRUCTURAL STEEL Per ASTM or as indicated				
a. Shop inspection of fabrication	1	Half Days	\$500	\$500
b. Inspection of structural steel-plumb and level, bolts	20	Half Days	\$500	\$10,000
c. Inspection of structural steel-plumb and level, bolts	10	Full Days	\$1000	\$10,000
4 MORTAR/GROUT Per ASTM Standards				
a. Form mortar/grout cubes for compressive strength.	3	Half Days	\$360	\$1,080
b. Laboratory pick-up of mortar/grout cubes, test and report results.	3	Each	\$150	\$450
5 COMBINATION RATES				
a. Half Day	30	Half Days	\$580	\$17,400
b. Full Day	10	Full Days	\$1160	\$11,600
6 ASPHALT PAVING PER ASTM Standards				
a. Half Day	4	Half Days	\$360	\$1,440
b. Full Day	4	Full Days	\$720	\$2,880
7 SPECIAL INSPECTION SERVICES				
a. Field Technician for Special Inspection.	1	Half Days	\$580	\$580
b. Professional Engineer for Special Inspections.	1	Half Days	\$900	\$900
Total Estimated Cost				\$ 97,605 *

*low bid shall be based on this total estimated cost

Provide the following as attachments to Sealed Bid:

1. The name, owner and location of the laboratory that will be utilized on this project, the relevant certifications of the laboratory and its technicians, and the normal and expedited turnaround times for all applicable test results, equal to or less than the turnaround required by the Contract Documents.
2. Evidence of all insurance coverages currently carried by the firm.
3. Evidence of the firms experience and capability to conduct the testing and inspections indicated, as documented by ASTM E 548, and specializing in the types of testing and inspections to be performed.
4. All inspection personnel must have a minimum of three (3) years of experience in construction inspection and test sample taking. Evidence of personnel experience must be provided in the sealed bid.

LIRO ENGINEERS

Materials Testing and Construction Inspection Services
South Division Fire Station Project

Name of Testing Agency Aardvark Geotechnical Engineering & Testing, Inc.

Unit Cost/ Fee Schedule

SOILS:

Field Inspection Rates

	Half Day	Full Day
	\$475	\$575

Services include but are not limited to: Inspections, recording and reporting of visual inspection of soils placement and lift thickness, compaction/soils density testing (using nuclear methods) of fill, and soil sampling by sieve and proctor testing, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Washed Sieve Analysis	Modified Proctor Test & Curve	Hydrometer Test	Ash Burn Walkley/Black Test	Chemical Analysis	Pick up & Delivery Rates
\$125	\$125	\$400	\$400	\$400	\$250

ASPHALT:

Field Inspection Rates

	Half Day	Full Day
	\$475	\$575

Services include but are not limited to: Inspection of base and binder courses, thickness, temperature, compaction testing and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

Samples/Tests - Rates

Asphalt Content	Aggregate Gradation
\$150	\$150

CONCRETE:

Reinforcing Steel Inspection Rates

	Half Day	Full Day
	\$475	\$575

Services include but are not limited to: Inspections, recording and reporting of installations of reinforcing steel, welded steel, and anchor rods, for conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

CONCRETE continued:

AARDVARK

Materials Testing and Construction Inspection Services
South Division Fire Station Project

Concrete Field Inspection Rates and description of included service.

	Half Day	Full Day
	\$475	\$575

Services include but are not limited to: Inspections, recording and reporting of all concrete testing, plant inspection, truck delivery timing and slip collection, materials certifications, test cylinder fabrication, and continuous inspection of poured-in-place concrete for conveyance, placement, consolidation and finishing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals.

Concrete Cylinder Testing – Lab Rates

Size of Cylinder	Composite Sample – Min. Quantity of Cylinders, including reports	Flat Rate for additional composite sample, including reports	Pick up and Delivery Rates	Additional Reports	Additional Cylinder
4" x 8"	\$20	\$20	\$250	\$100	\$20

Services include but are not limited to: Testing, recording and reporting of all concrete cylinder testing, all in conformance with Project drawings and Specifications, and all applicable shop drawings and submittals. Pickup and delivery of Composite Sample cylinders included in unit rate.

MASONRY:

Masonry Placement Inspection

	Half Day	Full Day
	\$475	\$575

Services include but are not limited to: Testing, recording and reporting on inspection of complete masonry systems including grout and mortar mixing, masonry unit installations and associated reinforcing, anchors and ties; mortar cube fabrication, grout prism fabrication, review of materials certificates for compliance, and inspection of weather protection, all in conformance of Project drawings and Specifications, and all applicable shop drawings and submittals.

Compression Tests – Lab Rates

Quantity of Cubes	Mortar Cube Test	CMU Test	Masonry Prism Test	Grout Prism Test	Pick Up and Delivery Rates
	\$50	\$75	\$50	\$75	\$250

STRUCTURAL STEEL/COLD FORM STEEL FRAMING:

Structural Steel and Cold Form Steel Framing Field Inspector Rates

Hourly	Half Day	Full Day	One Week	One Month	Overtime
\$200	\$1000	\$1600	x5	x22	\$300

Services include but are not limited to: Testing, recording and reporting on materials mill test certifications, visual inspections and physical verification of field (pre and post heat) welded and bolted connections, all non-destructive testing and inspections, and inspections for all shear connections, moment connections, metal decking, metal stair framing, and all related structural connection details, for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

APPROVED

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Materials Testing and Construction Inspection Services
South Division Fire Station Project
Ultrasonic & Magnetic Particle Testing Rates

Ultrasonic	Magnetic Particles
\$775	\$775

FIREPROOFING:

Field Inspection rates

	Half Day	Full Day
	\$475	\$575

Services include but are not limited to: Testing, recording and reporting on Inspection of fireproofing installation, material thickness, adhesion, cohesion and density, and inspection for conformance to Project drawings and Specifications, and all applicable shop drawings and submittals.

COMBINATION RATES:

	Half Day	Full Day
	\$475	\$575

Services include but are not limited to: Combination rates for one technician to perform Soils, Asphalt, Concrete, Masonry, Reinforcing steel, light gauge steel, thermal and moisture protections, fire stops and protective coatings, and other accompanying field inspections and testing.

Project Management and all incidental expenses shall be included in the individual wage rates submitted herein, and not be billed separately.

City of Worcester
South Division Fire Station Project
Material Testing Proposal Matrix
March 2026

1 CONCRETE

- a. Cylinders Required per set: 4
Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- b. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- c. Inspection of controlled concrete placement with slump, air entrainment, temperature, truck timing, casting of cylinder w/delivery to testing lab.
- d. Reinforcing Steel Inspections - Half Day
- e. Reinforcing Steel Inspections - Full Day

# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
30	Per set	\$80	\$2400
20	Half Days	\$475	\$9500
10	Full Days	\$575	\$5750
15	Half Days	\$475	\$7125
5	Full Days	\$575	\$2875

AARP VARI

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Materials Testing and Construction Inspection Services
South Division Fire Station Project

2 SOILS & AGGREGATES

	# of Tests Estimated	Unit of Measure	Unit Cost	Subtotal
a. Soil Inspection – Half Day	20	Half Days	\$475	\$9500
b. Soil Inspection – Full Day	10	Full Days	\$575	\$5750
c. Gradation Analysis	5	Each	\$150	\$750
d. Modified Proctor Test	5	Each	\$125	\$625

3 STRUCTURAL STEEL Per ASTM or as indicated

a. Shop inspection of fabrication	1	Half Days	\$1500	\$1500
b. Inspection of structural steel-plumb and level, bolts	20	Half Days	\$800	\$16000
c. Inspection of structural steel-plumb and level, bolts	10	Full Days	\$1400	\$14000

4 MORTAR/GROUT Per ASTM Standards

a. Form mortar/grout cubes for compressive strength.	3	Half Days	\$475	\$1425
b. Laboratory pick-up of mortar/grout cubes, test and report results.	3	Each	\$250	\$750

5 COMBINATION RATES

a. Half Day	30	Half Days	\$475	\$14250
b. Full Day	10	Full Days	\$575	\$5750

6 ASPHALT PAVING PER ASTM Standards

a. Half Day	4	Half Days	\$475	\$1900
b. Full Day	4	Full Days	\$575	\$2300

7 SPECIAL INSPECTION SERVICES

a. Field Technician for Special Inspection.	1	Half Days	\$475	\$475
b. Professional Engineer for Special Inspections.	1	Half Days	\$875	\$875

Total Estimated Cost

\$ 103500 *

*low bid shall be based on this total estimated cost

Provide the following as attachments to Sealed Bid:

1. The name, owner and location of the laboratory that will be utilized on this project, the relevant certifications of the laboratory and its technicians, and the normal and expedited turnaround times for all applicable test results, equal to or less than the turnaround required by the Contract Documents.
2. Evidence of all insurance coverages currently carried by the firm.
3. Evidence of the firms experience and capability to conduct the testing and inspections indicated, as documented by ASTM E 548, and specializing in the types of testing and inspections to be performed.
4. All inspection personnel must have a minimum of three (3) years of experience in construction inspection and test sample taking. Evidence of personnel experience must be provided in the sealed bid.

AARDVARK

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