

TOWN OF LINCOLN
BID FORM AND SPECIFICATIONS
BITUMINOUS CONCRETE PAVEMENT IN PLACE AND ROADWAY REPAIR
RFP 2010-20

1. This work shall consist of performing all labor and furnishing all equipment and materials necessary to apply bituminous concrete pavement and perform roadway repair as individual projects may require.
2. Paving and sidewalk work shall be done in accordance with the State of Rhode Island standard specifications for road and bridge construction and materials shall meet the requirements of Type I pavement and/or portland cement
3. Work shall be conducted under the general direction of the Director of Public Works and is subject to inspection by his appointed inspectors to insure compliance with the specifications and that quality workmanship is performed.
4. Asphalt shall be applied with an approved paver and compacted with an approved roller to a compacted thickness of 2-1/2" and/or 1-1/2" dependant of project requirements. All weight delivery slips shall be turned over to the Town of Lincoln representative at the job site and will be retained by the Town of Lincoln.
5. Roads to be paved will be cleaned, which includes sweeping and cleaning of gutters, grass growth, debris, and patched by the Bidder prior to paving. Roads to be paved will not necessarily be all in the same area and will require moving equipment to various job sites.
6. Bid price shall be for the time period from July 1, 2009 - June 30, 2010.
7. Bid price shall be Type I Asphalt Pavement per ton in place and compacted to a thickness of 1-1/2" and/or 2-1/2" as the project may require.

Unwarranted variations in thickness for the purpose of increasing tonnage placed will not be considered accepted workmanship.

CRACKSEALING IN PLACE

SCOPE OF WORK: The work covered by this section of the specification consists of furnishing all plant, labor, equipment and materials necessary to perform all operations in connection with the cleaning and sealing of construction and random cracks in bituminous concrete pavements, vegetation removal and sterilization of cracks where necessary.

MATERIAL: Crack sealer shall be an asphalt and fiber compound designed especially for improving strength and performance of the parent asphalt sealant.

- a. Asphalt sealant shall be AC-10 or AC-20 with penetration of 75-100.
- b. Sealant fiber materials shall be short-length polyester, having the following properties:

Material-----	Polyester
Color-----	Black
Diameter-----	0.0005mm
Length-----	1/4 inch
Tensile Strength-----	75, 000psi
Specific Gravity-----	1.36 (typical)
Elongation at Break-----	45%
Water Absorbability-----	1/2 of 1%
Ignition Point-----	1, 000 deg/F (min)
Melting Point-----	480 deg/F (min)

PREPARATION/INSTALLATION: All old material and other debris removed from the crack shall be removed from the pavement surface immediately by means of power sweeper or appropriate hand tools. Vegetation shall be removed and sterilized by use of propane torch unit, eliminating all vegetation, dirt, moisture and seeds. No crack sealing material shall be applied in wet cracks or where frost, snow or ice is present, nor when ambient temperature is below 40 degrees Fahrenheit. Material shall be installed in accordance with manufacturers material installation instructions. "Black Beauty" sand blasting aggregate shall be applied over installed hot liquid sealer immediately following installation of sealer to prevent tracking of sealer on roadway. Contractor to erect temporary signs indicating crack sealing work in progress as needed to alert motorists of work in progress. Schedule of Streets to be treated will be provided to contractor by the Engineer in charge.

WORKMANSHIP: All workmanship shall be of the highest quality, and excess or spilled sealer shall be removed from the pavement by approved methods and discarded. Any workmanship determined to be sub-standard in quality will not be accepted, and will be corrected and/or replaced as required by the engineer in charge.

MEASUREMENT AND PAVEMENT: Measurement for bid shall be by the gallon. Payment shall be at the unit price bid in the proposal and shall be complete payment for the entire item including traffic control, preparation and placement of materials, labor and equipment to be used on this project.

CONCRETE SIDEWALKS IN PLACE

DESCRIPTION: This work shall consist of Portland cement concrete sidewalks, constructed on a gravel base, in accordance with these specifications and in reasonable close conformity with the lines and grades established on site.

MATERIALS: Concrete for sidewalks shall meet the requirements of Section 600 Portland Cement Concrete for Class B Concrete and Section M.02, Materials of the R.I. Dept. of Transportation, Standard Specifications for Road and Bridge Construction, as applicable. Concrete mixes will be subject to inspection and tests at the mixing Plants for compliance with quality requirements. Gravel borrow sub base shall conform to Section M.01, Borrow and Aggregates. All materials will be subject to inspection for acceptance as to condition at the latest practicable time the Engineer has the opportunity to check for compliance, prior to or during incorporation of materials in the work.

CONSTRUCTION METHODS:

- (a) **Excavation.** Excavation shall be made to the required depth and to a width that will permit the installation and bracing of the forms. The foundation shall be shaped and compacted to a firm even surface conforming to the section shown on the plans. All soft and yielding material shall be removed and replaced with acceptable material.
- (b) **Gravel Borrow Sub base.** A gravel base shall be placed in layers not over 6 inches in depth and compacted to the specified depth below finish grade.
- (c) **Forms.** Forms shall be of wood or metal and shall extend for the full depth of the concrete. All forms shall be straight, free from warp and of sufficient strength to resist the pressure of the concrete without springing. Bracing and taking of forms shall be such that the forms remain in both horizontal and vertical alignment until their removal.
- (d) **Placing Concrete.** The foundation shall be thoroughly moistened immediately prior to the placing of the concrete. The proportioning, mixing, and placing of the concrete shall be in accordance with the requirements for the class of concrete specified.
- (e) **Finishing.** The surface shall be finished with a wooden float. No plastering of the surface will be permitted. All outside edges of the slab and all joints shall be edged with a ¼ inch radius-edging tool.
- (f) **Joints.** Expansion joints shall be of the dimensions specified, and shall be filled with a ¼" Premoulded expansion joint filler. The sidewalk shall be divided into sections by dummy joints formed by a jointing tool or other acceptable means as directed. These dummy joints shall extend into the concrete for at least 1/3 of the depth and shall be approximately 1/8 inch wide. Construction joints shall be formed around all appurtenances such as manholes, utility poles, gas gates, etc., extending into and through the sidewalk. Premoulded expansion joint filler ¼" thick shall be installed in these joints. Expansion joint filler as specified shall be installed between any fixed structure such as building or retaining walls. This expansion joint material shall extend for the full depth of the sidewalk.
- (g) **Curing.** Concrete shall be cured for at least 72 hours. Curing shall be by means of moist burlap mats or by other approved methods. During the curing period all traffic, both pedestrian and vehicular, shall be excluded. Vehicular traffic shall be excluded for such additional time as the Engineer may direct.
- (h) **Cutting and matching sidewalks.** Where a newly constructed sidewalk abuts an existing sidewalk, the existing sidewalk shall be cut with a concrete saw only.

SHOULDER AND SLOPE STABILIZATION

Roadway shoulders shall be stabilized utilizing a minimum 4 inches of loam, seeded and rolled to a nominally uniform surface. Roadway shoulders as well as drainage outfalls may be stabilized utilizing a minimum 4" thick layer of Rip Rap meeting the specifications of RIDOT R1, R2 or R3 Rip Rap Graded Stone.

BITUMINOUS CONCRETE PAVEMENT IN PLACE AND ROADWAY REPAIR
BID SHEET
MAY 2010
RFP 2010-20

PRICE PER TON (1-1/2") COMPACTED THICKNESS	\$ _____ PER TON
PRICE PER TON (2-1/2") COMPACTED THICKNESS	\$ _____ PER TON
GRAVEL BASE/LEVELING COURSE	\$ _____ PER TON
CUT KEYWAYS/JOINTS AS NECESSARY	\$ _____ PER L.F.
ASHPHALT EMULSION TACKED COAT	\$ _____ PER SQ YD
INFRARED SEAL EDGES	\$ _____ PER L.F.
CRACK SEALING	\$ _____ PER GAL.
ADJUST/RE-SET /RAISE SEWER/DRAINAGE MANHOLE COVERS	\$ _____ EACH
ADJUST/RE-SET/RAISE CATCH BASINS	\$ _____ EACH
ADJUST/RE-SET/RAISE WATER GATE BOXES (PRICE SHOULD INCLUDE EXT.)	\$ _____ EACH
CONCRETE SIDEWALKS	\$ _____ PER CY
RIP-RAP SHOULDER REPAIR IN PLACE	\$ _____ PER TON
LOAM AND SEED SHOULERS	\$ _____ PER SQ YD

RE-SET/RAISE GAS SHUTOFF AS REQUIRED SHALL BE NO CHARGE TO THE TOWN OF LINCOLN.