

TOWN OF BERLIN

Department of Public Works

240 Kensington Road • Berlin, CT 06037 **Office** (860) 828-7022 • **Fax** (860) 828-7180

LEGAL NOTICE

INVITATION TO BID Misc. Concrete Sidewalks Contract #2014-18

The Town of Berlin is seeking bids for Contract #2014-18, Concrete Sidewalks, at the Public Works Office, Room 8, Town Hall, 240 Kensington Road, Berlin, CT until 2:00 PM, Tuesday, May 13, 2014, at which time they will be publicly opened and read.

This contract consists of installing new concrete sidewalks and reconstruction of existing concrete sidewalks and bituminous concrete driveway aprons, and related work, at various locations within the Town of Berlin. The bidder is advised that quantities shown as a part of the bid may not reflect a true and accurate estimate of the work to be performed. The intent of this bid is to establish unit prices for the various items as shown, so that in the event a particular need arises requiring sidewalks, the Town of Berlin will have a contractor available.

The Town Council reserves the right to reject any and all bids, to waive any minor irregularities in the bidding, and to award the contract to other than the lowest bidder, if deemed in the best interest of the Town.

All concerns having their general place of business in the Town of Berlin shall receive preferential advantage in the awarding of the contracts (excluding bids involving State or Federal grants) as outlined in "An Ordinance Concerning Preferential Bidding Procedures" (Adopted May 19, 2009).

Specifications and bid proposals are available at the office of the Director of Public Works/Town Engineer (Room 8).

TOWN OF BERLIN Denise M. McNair Town Manager

Publish in: The New Britain Herald April 23, 2014



TOWN OF BERLIN

Public Works Department

240 Kensington Road • Berlin, CT 06037 **Office** (860) 828-7022 • **Fax** (860) 828-7180

Re: Contract #2014-18 Miscellaneous Concrete Sidewalks at Miscellaneous Locations in the Town of Berlin

To Whom It May Concern:

The Town of Berlin is requesting your proposal for installation of new concrete sidewalks and the reconstruction of existing concrete sidewalks. The sidewalks will be constructed at various locations throughout the Town of Berlin. The work shall consist of excavation and removal of existing lawns, drives, road pavement and curbing; and other existing improvements to subgrade; furnishing and placing compacted 8 inch base; form work; furnishing, placing and curing concrete; and restoration of all disturbed areas including lawns, driveways, road pavement and curbing; all in accordance with the attached specifications. The bidder is advised that quantities shown as a part of the bid may not reflect a true and accurate estimate of the work to be performed. The intent of this bid is to establish unit prices for the various items as shown so that in the event a particular need arises requiring sidewalks, the Town of Berlin will have a contractor available. This contract will involve work to be performed through the 2014 construction season until December 30, 2015.

Although the sidewalks are to be installed within the public highway limit, cultivated shrubbery, trees, pebbles, woodchips or planted ground cover; or other improvements may be located in the way of the proposed sidewalks. It shall be the responsibility of the adjoining property owner to remove such improvement, if wanted. However, the Contractor shall notify each owner at least one week prior to disturbing these areas so that the owner may make necessary arrangements for the removal of desired items. Handicapped accessible ramps will be constructed to Town specifications.

Your proposal must be on the attached form and delivered to the office of the Town Engineer, Berlin Town Hall, in a sealed envelope marked "Miscellaneous Concrete Sidewalks, #2014-18" no later than 2:00 P.M., Tuesday, May 13, 2014, at which time and place all bids shall be opened, read and recorded. The Town of Berlin reserves the right to reject any or all bids, award the work to other than the lowest bidder, and to waive minor irregularities in the bidding. The successful bidder shall become licensed by the Town of Berlin before commencing the work.

The Town of Berlin will require the contractor to respond and begin work within ten (10) working days from the notice to proceed as work arises. Failure to comply may result in a forfeiture of the bid.

Thank you for your interest. Any questions may be directed to the Public Works Department at 860-828-7069.

James P. Horbal

Deputy Director of Public Works

Attachments

SPECIFICATIONS FOR THE INSTALLATION OF CONCRETE SIDEWALK AND CURB IN THE TOWN OF BERLIN Bid # 2014-18

1. GENERAL

Unless otherwise specified herein, all materials and methods used in the construction of
concrete sidewalks shall be in conformance with the Standard Specifications for Roads,
. Bridges and Incidental Construction of the Bureau of Highways, Connecticut Department
of Transportation, Form 816, as revised.

b. Definitions:

- 1. Town Engineer The Town Engineer of the Town of Berlin and/or the authorized agent.
- 2. ASTM The American Society for Testing and Materials.
- 3. Bureau of Highways The Bureau of Highways of the Connecticut Department of Transportation, or its successor agency, having jurisdiction over the state highways.
- c. Wherever standard specifications are referenced throughout this section, it shall mean the latest revision of the specification shall prevail.

2. MATERIALS

- a. Portland cement shall conform to Specifications for Portland Cement ASTM Designation C-150 and must be manufactured in the United States. Only Type II cement shall be used.
- b. Aggregates shall conform to Connecticut Bureau of Highways specifications for concrete aggregate. Only crushed trap rock shall be used as a coarse aggregate.
 - A minimum of two sizes of stone shall be blended at the time of batching and must meet the gradation requirements as required in Concrete Aggregate Specifications ASTM Designation C-33. Laboratory tests of all proposed aggregates shall be made in accordance with ASTM Specifications C-33 prior to placing any concrete. Materials shall be tested and approved on an annual basis, or when the source of materials is changed, or at any time when requested by the Town Engineer.
- c. Water used in mixing concrete shall be clean and free from deleterious amounts of acids, alkalies, or organic materials.
- d. Air-Entraining Materials The entrainment of air in concrete shall be accomplished by adding an air-entraining mixture at the time of batching. Admixtures added to the sand or water shall conform with Specifications for Air-Entraining Admixtures for Concrete, ASTM Designation C-260.

- e. Water Reducing and Set Retarding Admixtures which meet ASTM Specifications C-494, for chemical mixtures for concrete, may be used in concrete mixes, with prior approval of the Town Engineer, and their use shall not reduce the minimum content of cement as specified.
- f. Mesh reinforcement shall be used in all driveway walks and aprons. Mesh material shall be of 6" x 6" No. 8 gauge welded steel wire conforming to ASTM Specifications A-185. Concrete for all driveway walks and aprons shall be a minimum of 8" thick. Mesh shall be placed no less than 2" and no more than 3" from the bottom of the slab.
- g. Preformed non-extruding joint filler must be used and must conform to the ASTM Specification D1751-65 or AASHO Specification M213-65 or Federal Specification HH-F-341E Type 1.
- h. Processed aggregate base shall meet Connecticut Bureau of Highways Specification for Crusher Run Stone, Form 810 M-02-02-2, or for Processed Aggregate Base and Pavement Form 810 MOS.01.

3. CONCRETE QUALITY

- a. Minimum Strength 4,000 PSI.
- b. Minimum cement content shall not be less than 6.75 sacks per cubic yard.
- c. Maximum size of aggregate shall not exceed 1".
- d. Maximum water content shall not exceed 5.3 gal. per sack of cement.
- e. Slump shall be 2-1/2 inches, plus or minus 1/2 inch.
- f. The amount of entrained air shall be between 5 and 7 percent air by volume.
- g. Test for air content of fresh concrete shall be made during construction.

Because of the effects of mixing and vibration samples for air content, samples should be taken from concrete after it has been placed by qualified technicians per ASTM C-231, periodically, or any time, as requested by the Town Engineer.

4.a. TESTS AND INSPECTION

The Town Engineer is authorized to conduct, or have conducted, such tests as deemed necessary, of concrete used in work under these specifications. The contractor shall furnish to the Town Engineer, concrete under job conditions for the making of standard test cylinders. The Town Engineer shall base his approval of methods and details of proportioning, batching, mixing and placing of concrete upon the results of these tests.

The contractor shall forward daily to the Town Engineer, a copy of each concrete delivery slip for each truck load of concrete which will include all data as specified in Item 3.

The Town Engineer, at any time, may require batch plant inspection to certify the weights of all materials as batched into trucks serving construction of any sidewalks or curbs in the Town of Berlin.

4.b. BATCH PLANT APPROVAL

Any concrete producer will be required to show that his plant and equipment must meet all requirements as established by ASTM designation C94-67, and shall also be currently approved by the State of Connecticut Bureau of Highways.

CONCRETE WALKS - HOW LAID

a. Contractor shall excavate to a depth of 13" below the finished grade of the proposed walk, then fill in with a depth of 8" of processed aggregate to be well tamped so as to leave a firm and even surface. Then fill to a minimum of 5" with a mixture of concrete as specified in Item 2.

Excavation for driveway walks and aprons shall be a minimum of 16" below finished grade. The base is to be 8" processed aggregate and the walk and apron to be 8" reinforced concrete.

Walks, when laid, shall be at least four (4) feet wide, or to a width ordered by the Town Engineer and laid with the following cross-pitch. From the inner edge of concrete walk to the outer edge of concrete walk a decline of one-quarter (1/4) inch per foot.

- b. All concrete walks shall be blocked out in 10 foot sections with 1/4" expansion joint every twenty (20) feet. A dummy or blind joint of 3/4" depth shall be marked in the center of each 10 foot section. Blocks may be made larger or smaller but only with permission from the Town Engineer.
- c. In full concrete walks between the curb and any building, there shall be placed a strip of 1/2" non-extruding expansion joint at the building line. The expansion joint shall be laid flush with the finished surface of the concrete walk.
- d. The forms used shall be steel or wood firmly supported to line and grade with 1/4" steel cross forms (templates) properly placed to the full depth of the concrete. All forms shall be cleaned and oiled or wetted before placing concrete. The accuracy of the alignment and grade elevation of the form as to the conformity with the established line and grade as given by the Town Engineer, shall be checked before placing the concrete. Also, the forms shall be examined for stability of setting.

The correct cross sections of the sub-grade shall be checked before the concrete is placed by testing with a template of wood or metal, the bottom surface of which conforms to the desired contour. Any irregularities thus indicated shall be corrected.

e. All walks and driveway aprons must be protected from travel for at least 72 hours.

6. PLACING AND FINISHING OF CONCRETE

- a. Before the concrete is placed, the sub-grade shall be thoroughly dampened so that it is moist throughout, but without puddles of water. Concrete shall be placed immediately after mixing and may be placed in one course. The concrete shall be well spaded against the sides of the forms to eliminate voids. The cross forms shall be left in place until the concrete has received its initial set.
- b. No finishing operation shall be performed while free water is present. Finishing operations shall be delayed until all water and water sheen has left the surface and the concrete has started to stiffen. When partially set, the concrete surface shall be struck off with a template and shall be floated with a wood float. After floating, and after the water sheen has disappeared, a jointer shall be used to form a round edge not exceeding 1/4" radius at all surface edges and joints.

After edging and jointing operations, the surface shall be floated with either a wood or a magnesium float.

If necessary, tooled joints and edges shall be rerun after floating to maintain uniformity.

After floating, the surface shall be brushed by drawing a soft-bristled push broom with a long handle over the surface of the concrete to produce a nonslip surface.

7. CURING

a. Concrete shall be protected so that little or no moisture is lost during the early stages of hardening. Newly placed concrete shall not be permitted to dry out too fast and must be protected from the sun and drying winds. This may be done with burlap or canvas coverings kept continuously wet.

8. CONCRETE CURBS

- a. All concrete curbs will be constructed with materials and methods as prescribed above for concrete sidewalks as applicable.
- b. The contractor shall excavate to a depth of 20" below finished grade of curbs.

The bottom of the curb shall be 8" wide for a distance of 10" in height, then a gradual taper on a straight line of curb so that the top of the finished curb shall be 6" wide.

The accuracy of the alignment in grade elevation of the forms as to conforming with the established line and grade as given by the Town Engineer, shall be checked before placing the concrete in the forms and shall be examined for stability of setting. Any irregularity thus indicated shall be corrected.

The concrete curb shall be poured in sections not less than six (6) feet and not more than twenty (20) feet. Non-protruding expansion joints 3/4" thick by the width and depth of the curb shall be placed at a maximum of twenty (20) feet apart. Only the non-extruding expansion joint specified above shall be used and shall be placed so the top of the joint will be flush with the top of the concrete.

Curbs shall be protected from traffic for at least 72 hours after construction. The curbs shall be cured and treated for frost protection in accordance with paragraph 7 above.

9. CONCRETING IN COLD WEATHER

See Section 6.01.03-12, Standard Specs for Roads, Bridges and Incidental Construction, Bureau of Highways, Connecticut Department of Transportation.

CONTRACT #2014-18

PROPOSAL

For installation of concrete sidewalks, complete as and where specified, the following unit prices are proposed: (Note: Unit prices per item govern; estimated quantities may vary and are dependent upon the actual schedule of work to be performed; total prices quoted are for bid comparison only.)

Ι.,	For five (5) inch thick walks, four (4) foot wide, including all fill material as required, and an			
	eight (8) inch thick process stone base, the sum of	dollars and	cents	
	(\$) per linear foot; 500 linear feet estimated,			
	total estimated price \$			
2.	For five (5) inch thick walks, five (5) foot wide, including all fill eight (2) inch thick processed stone have the sum of			
	eight (8) inch thick processed stone base, the sum of (\$\) per linear foot; 100 linear feet estimated,	donars and	cent	
	total estimated price \$			
3.	For eight (8) inch thick reinforced walks, four (4) foot wide, incleight (8) thick processed stone base, the unit price of cents (\$) per linear foot; 500 linear	dollars and	l, and an	
	cents (\$) per linear foot; 500 linear total estimated price \$		•	
4.	For eight (8) inch thick reinforced walks, five (5) foot wide, incl	uding all fill material	, and an	
	eight (8) inch thick processed stone base, the unit price of cents (\$) per linear foot; 100 linear	dollars and	•	
	total estimated price \$	1000 0000000000000000000000000000000000		
5.	For the removal of old walk, excavate soil and replace with 8" prothick walk, four (4) foot wide, the unit price of \$			
	total estimated price \$			
6.	For the removal of old walk, excavate soil and replace with eight	t (8) inch processed s	stone and	
	eight (8) inch thick reinforced walk in driveway area, four (4) fo			
	\$ per linear foot; 500 feet estimated,			
	total estimated price \$			
7.	For the removal of old walk, excavate soil and replace with eight	t (8) inch processed s	tone and	
	five (5) inch thick walk, five (5) foot wide, the unit price of \$100 feet estimated,	per lin	iear foot;	
	total astimated price \$			

8.	For the removal of old walk, excavate soil and replace with eight (8) inch processed stone an eight (8) inch thick reinforced walk in driveway area, five (5) foot wide, the unit price of \$ per linear foot, 100 feet estimated, total estimated price \$		
9.	For the removal of 6" Bituminous Concrete Lip Curbing, the unit price of \$ per linear foot, 200 feet estimated, total estimated price \$		
10.	For the installation of 6" Bituminous Concrete Lip Curbing, the unit price of \$ per linear foot, 200 feet estimated, total estimated price \$		
11.	For the removal of 6" Bituminous Concrete Lip Curbing, 5' wide grassed shoulder and 4' wide concrete sidewalk, the unit price of \$ per linear foot; 400 linear feet estimated, total estimated price \$		
12.	2. For the installation of an 8" processed stone base and 8" thick reinforced concrete walk 8' wide and a 6" thick, 6" wide monolithic concrete curb, the unit price of \$ per linear foot; 400 linear feet estimated, total estimated price \$		
13.	For the installation of concrete curbing, where and as ordered, complete in place, the unit price of dollars and cents (\$) per linear foot; 50 feet estimated, total estimated price \$		
14.	For furnishing and installing borrow material compacted in place, complete, the sum of dollars andcents (\$) per cubic yard, 20 cubic yards estimated, total estimated price \$		
15.	For furnishing and installing bank run gravel compacted in place, complete, the sum of dollars and cents (\$) per cubic yard, 20 cubic yards estimated, total estimated price \$		
16.	. For permanent pavement restoration of driveways to include an eight (8) inch processed stone base and a compacted two (2) inch bituminous concrete pavement, where and as ordered, the unprice of dollars and cents (\$) per square yard, 100 square yards estimated, total estimated price \$		
17.	For restoration of maintained lawns, where and as ordered, to include 6" of loam and sod, complete, the unit price of dollars and cents per square yard, 100 square yards estimated, total estimated price \$		
18.	For restoration of maintained lawns, where and as ordered, to include 6" of screened loam, seed, fertilization and mulch, complete, the unit price of dollars and cents (\$) per square yard, 500 square yards estimated, total estimated price \$		
19.	For restoration of non-maintained lawns, where and as ordered, to include 3" of loam, seed, fertilization and mulch, complete, the unit price of dollars and cents (\$) per square yard, 100 square yards estimated, total estimated price \$		

20.	For removal of old walk and concrete curb (or bituminous curb) four (4) feet wide				
	(\$) per linear foot, 25 fee	estimated, total estimated price \$			
18.	. For removal of old walk and concrete curb (or bituminous curb) four (5) feet wide (\$) per linear foot, 25 feet estimated, total estimated price \$				
19.	For handicapped ramps, complete, the cents (\$	nit price of dollars and each, five estimated,			
	cents (\$ total estimated price \$				
20.		hrough a uniformed flagman, the unit price of nts (\$) per hour; 100 hours estimated			
21.		hrough a uniformed policeman, the unit price of ints (\$) per hour; 100 hours estimated			
22.	Tree removal services cost to be established at time of request.				
	TOTAL OF ALL ITEMS AS COMPU	TED BY BIDDER \$			
	· 				
	Signature of Bidder	Name of Company (If Applicable)			
	Printed Name	Address			
	Date	Phone Number			