Jason Bowsza

First Selectman

Leonard J. Norton, P.E.

Director of Public Works/Town Engineer

July 7, 2022

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#### **Project Directory**

OWNER: Town of East Windsor

Jason Bowsza, First Selectman

11 Rye Street

Broad Brook, CT 06016 Phone: (860) 623-8122

#### **Department of Public Works**

Leonard J. Norton, P.E., Director of Public Works/Town Engineer 6 Woolam Road

East Windsor, CT 06088 Phone: (860) 292-7073

#### TOWN OF EAST WINDSOR

#### NOTICE OF BID

## Sidewalk Replacement Main Street Warehouse Point

Sealed bids are invited and will be received by the Town of East Windsor, until 10 a.m., Thursday July 28, 2022, at the Department of Public Works, 6 Woolam Road East Windsor, Connecticut, at which time and place they will be publicly opened and read aloud.

Proposals must be submitted on the forms provided and in a sealed envelope plainly marked with the appropriate title.

A mandatory pre-bid conference to review the project will be held at the Public Works Facility, East Windsor, CT, Monday, July 18, 2022, at 10:00 a.m.

A satisfactory Bid Bond or Certified Check, in an amount equal to five percent (5%) of the base bid, shall be submitted with each bid. The Bid Bond shall be made payable to the Town of East Windsor and shall be properly executed by the Bidder. A 100% Performance, Labor and Material Bond is also required. All sureties must be listed on the most recent IRS circular 570.

The Connecticut DOT permit is required for the work within the state ROW for Route 510.

The Information for Bidders, Form of Bid, Specifications, and other contract documents may be obtained or examined at the Department of Public Works, 6 Woolam Road, East Windsor, CT Monday – Friday 7:30am – 3:00pm (860) 292-7073.

Bids, to receive consideration, must be in the hands of the authorized representative, no later than the day and hour mentioned above.

The Town of East Windsor reserves the right to accept or reject any or all bids; to waive any informalities, or; to accept any bid deemed in the best interests of the Town of East Windsor.

All bids will be considered valid for a period of sixty (60) days.

AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER MBE's, WBE's, SBE's and SECTION 3 DESGINATED ENTERPRISES ARE ENCOURAGED TO APPLY

#### **Project Description**

The project includes the replacement of approximately 2000 linear feet of existing bituminous sidewalk with new 4' and 5' wide concrete sidewalk. The Bidder is responsible to visit the site and familiarize himself with existing conditions. Items needed to complete this project shall include, but are not limited to, the following:

- 1. Call Before You Dig: 1-800-922-4455. Notify the Town Engineer immediately if any utility conflicts are encountered.
- 2. Obtain a Connecticut DOT encroachment permit for working within the State ROW for Route 510.
- 3. Provide traffic and pedestrian barricades and construction warning signs as required by applicable laws and regulations. Provide at least one (1) dedicated flagman to direct traffic around work. Notify First Selectman's Office and the East Windsor Police Department 24 hours prior to obstructing roadway. Maintain at least one (1) lane of travel on each street. Provide emergency access to all buildings as required.
- 4. Saw cut and remove existing bituminous sidewalk from site and dispose of in accordance with all applicable laws and regulations.
- 5. Check existing base material for suitability. Notify Town Engineer of areas with unsuitable base material.
- 6. Form and pour new 4' and 5' wide concrete sidewalks on prepared base material.
- 7. Protect new concrete until properly set.
- 8. Remove all excess material from site and dispose in accordance with applicable laws and regulations.
- 9. Keep roadways clean and clear of obstructions after each workday.
- 10. Loam and seed all disturbed areas.
- 11. Restore, replace, or reconstruct any features disturbed during construction.
- 12. Coordinate work with local utility companies as required. The Contractor is responsible to protect and replace any utilities disturbed during construction. This includes but is not limited to working around overhead wires and water curb boxes.
- 13. Replace any signage.
- 14. The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of its employees as may be necessary to comply with the regulations and requirements of the State Department of Public Health.

#### Instructions to Bidders

#### 1. RECEIPT OF OPENING BIDS

Sealed bids of proposals for performing the work described herein will be received at the Department of Public Works, 6 Woolam Road, East Windsor,06088, until the time and date as shown on the Invitation to Bid.

Copies of contract documents may be obtained from the Department of Public Works, during the hours specified on the Invitation to Bid.

Proposals must be made on the forms furnished herein. Prior to the time and date designated for receipt of bids, a bid submitted may be modified or withdrawn by notice to the party receiving bids at the place designated for receipt of bids. A change shall be so worded as not to reveal the amount of the original bid.

Withdrawn bids may be resubmitted up to the date and time designated for the receipt of bids provided that they are then fully in conformance with these instructions to bidders.

Unless stated otherwise in the Advertisement or Invitation to Bid, the properly identified bids received on time will be opened publically and will be read alound. The owner shall have right to reject any or all bids, reject a bid not accompanied by a required bid security or by any data required by these Contract Documents, or reject a bid, which is in any way incomplete or irregular.

#### 2. ADDENDA & INTERPRETATIONS

Any request from prospective bidders for interpretation of meaning of Contract Drawings, specifications or other Contract Documents shall be made in writing to Leonard Norton, Director of Public Works/Town Engineer, 11 Rye Street, Broad Brook, Connecticut 06016, or email to <a href="mailto:lnorton@eastwindsorct.com">lnorton@eastwindsorct.com</a> and to be given consideration must be received at least seven (7) days prior to date fixed for opening of proposals. Interpretations will be made in the form of written addenda to the Contract Documents, which addenda shall become a part of Contract. Not later than three (3) days prior to date fixed for opening of proposal, addenda will be mailed to all persons who obtained Contract Documents and provided information to be included on the list of Bidders. Failure of any bidder to receive any such addenda shall not relieve bidder from any obligation under his proposal as submitted.

Instructions to Bidders (continued)

#### 3. METHOD OF AWARD

The contract will be awarded to the responsible bidder submitting the lowest bid complying with conditions of these Contract Documents. The bidder to whom the award is made will be notified at the Owner's convenience. The successful bidder shall execute and deliver to the Owner, within ten (10) days after receiving the Notice of Award, an Agreement in the form provided by the Owner, in such number as the Owner shall require.

The Owner also reserves the right to reject any or all bids, for any reason the Owner deems advisable, and to award the contract or contracts to any Contractors bidding on the work regardless of the amount of bid. It is intended that the contract or contracts will be awarded to the lowest responsible and eligible bidder possessing skill, ability and integrity necessary to provide faithful performance of the work.

#### 4. BID SECURITY

The bid must be accompanied by a Bid Bond, in an amount equal to five (5) percent of the amount of the bid. The Bid Bond shall be duly executed by the Bidder as principal and having a surety thereon, which shall be acceptable to the Owner.

No bidder may withdraw his bid within thirty (30) calendar days after the actual date of bid opening.

#### 5. SUBCONTRACTORS

The bidder is advised that any person, firm or other party to whom it is proposed to award a subcontract under this contract must be acceptable to and approved by the Owner. A list of intended subcontractors must be included on the submitted Bid Form.

#### 6. QUALIFICATIONS OF BIDDER

The Town of East Windsor may make such investigation as deemed necessary to determine the ability of the bidders to discharge the contract. The bidder shall furnish the Owner with all such information and data as may be required for that purpose. The Owner reserves the right to reject any bid if the bidder fails to satisfactorily convince the Owner that he is properly qualified by experience and facilities to carry out the obligation of the Contract and to satisfactorily complete the work called for herein. Conditional bids will not be accepted.

<u>Instructions to Bidders</u> (continued)

#### 7. EXECUTION OF CONTRACT & NOTICE TO PROCEED

Upon receipt of acceptable signed Agreement, the Owner will, within ten (10) days, enter into and sign the Agreement unless it deems it not in the best interest of the Town.

The notice to proceed shall be issued within ten (10) days of the execution of the Agreement by the Owner. Should there be reasons why the notice to proceed cannot be issued within such period, the time may be extended by mutual agreement.

#### 8. PAYMENT

The Owner shall pay the Contractor 100% of the Contract value upon completion of the work, minus any penalties for delay of completion of work

#### 9. DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The bidder to whom the contract is awarded will be required to execute the Agreement within ten (10) calendar days from the date when the Notice of Award is delivered to the Bidder. In case of failure of the Bidder to execute the Agreement, the Owner may, at its option, consider the Bidder in default, in which case the bid security accompanying the proposal shall be called.

#### 10. TIME OF COMPLETION

The Bidder must agree to commence work on or before the date specified in the Notice to Proceed and to faithfully complete the project within sixty (60) calendar days. The Owner may deduct \$100 per day from payment due to the contractor for everyday beyond this time limit.

#### 11. CONDITIONS OF WORK

At the date fixed for opening of bids, it will be presumed that each Bidder has made an examination of location and site work to be done under contract; has satisfied himself as to actual condition, requirements and quantities of work; and has read and become thoroughly familiar with Contract Documents, including Contract Drawings and addenda.

<u>Instructions to Bidders</u> (continued)

#### 12. INTERPRETATION OF ACCEPTABLE WORK

The specifications, bidding and contract documents are to be interpreted as meaning those acceptable to the Town of East Windsor. Any substantive changes or interpretations will be issue by the town in writing as an addendum.

#### 13. TAX EXEMPTIONS

The Town of East Windsor is exempt from federal excise taxes and Connecticut's salestax and use taxes. Bidders shall avail themselves of these exceptions.

#### 14. INSURANCE

The bidder awarded this bid must provide a current certificate of insurance to the Office of the First Selectman prior to the commencement of work with the following requirements:

- A. liability limits for bodily injury and persona injury \$1,000,000 per occurrence
- B. liability limits for property damage including that caused by motor vehicle \$1,000,000 per occurrence
- C. contractual liability \$1,000,000 per occurrence
- D. owner's protective liability and property damage
- E. Workers compensation as required by Connecticut state statute
- F. The Town of East Windsor is to appear as an additional insured on all certificate of insurance
- G. All insurance is to be provided by a company authorized to issue such insurance in the State of Connecticut
- H. Insurance may not be canceled or modified without sixty (60) days written notice by registered US mail to Office of the First Selectman, Town of East Windsor, 11 Rye Street Broad Brook, CT 06016.
- I. The insurance company rating should be no less than A-VII by A.M. Best.

#### 15. LAWS AND REGULATIONS

The Bidder's attention is directed to the fact that all applicable federal and state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout, and they will be deems to be included in the contract the same as though herein written out in full.

Contracts for work under this proposal will obligate the Contractors and sub-contractors not to discriminate in employment practice.

#### 16. RIGHTS-OF-WAY

The Owner shall provide, upon request, any available information, which is pertinent to and delineates and describes the land owned and rights-of-way acquired or to be acquired.

#### 17. SURVEY

If any existing East Windsor highway bounds, Department of Transportation bounds, or private property bounds are disturbed during construction, they will be carefully and exactly replaced, at the Contractor's expense, by a Land Surveyor licensed in the State of Connecticut.

#### 18. SIGNS AND FENCES

Any street or advisory signs, fences or other appurtenances disturbed or removed by the contractor, whether shown in the plans or not, shall be reset or replaced at the Contractor's expense and as directed by the Engineer.

## FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

- Sec. 31-53b. Construction safety and health course. New miner training program. Proof of completion required for mechanics, laborers and workers on public works projects. Enforcement. Regulations. Exceptions. (a) Each contract for a public works project entered into on or after July 1, 2009, by the state of any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (g) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.
- (b) any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section.
- (c) Not later than January 1, 2009, the Labor Commissioner shall adopt regulations, in accordance with the provisions of Chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall required that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issue by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project.
- (d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

(P.A. 06-175, S.1; P.A. 08-83, S.1.)

History: P.A. 08-83 amended Subsec. (a) by making provisions applicable to public works project contracts entered into on or after July 1, 2009, replacing provision re total cost of work with reference to Sec. 31-53(g), requiring proof in certified payroll form that new mechanic, laborer or worker has completed a 10 hour or more construction safety course and adding

provision re new miner training program, amended Subsec. (b) by substituting "person" for "employee" and adding "or program", amended Subsec. (c) by adding "or in accordance with Federal Mine Safety and health Administration Standards" and setting new deadline of January 1, 2009. Deleted former Subsec. (d) re "public building". Added new Subsec. (d) re exemptions for public service company employees and delivery drivers who perform no labor other than delivery and made conforming and technical changes, effective July 1, 2009.

## Informational Bulletin The 10-Hour OSH Construction Safety and Health Course

- 1. This requirement was created by Public Act No. 06-175, which is codified in Section 31-53b of the Connecticut General Statutes(pertaining to the prevailing wage statutes);
- 2. The course is required for public works construction projects (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1, 2007;
- It is required of private employees (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public building project where the total cost of all work to be performed is at least \$100,000;
- 4. The ten-hour construction course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- 5. The internet website for the federal OSHA Training Institute is <a href="http://www.osha.gov/fso/ote/training/edcenters/fact sheet.html">http://www.osha.gov/fso/ote/training/edcenters/fact sheet.html</a>;
- 6. The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- 7. Within 30 days of receiving a contract award, a general contractor must furnish proof to the Labor Commissioner that all employees and apprentices performing manual labor on the project will have completed such a course;
- 8. Proof of completion may be demonstrated through either: (a) the presentation of a bona fide student course completion card issued by the federal OSHA Training Institute; or (2) the presentation of documentation of provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- 9. Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;
- 10. Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. 31-53(f) on which such employee's name first appears;
- 11. Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course

- completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in non compliance;
- 12. Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- 13. The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- 14. The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- 15. Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.

THE ABOVE INFORMATION IS PROVIDED EXCLUSIVELY AS AN EDUCATIONAL RESOURCE, AND IS NOT INTENDED AS A SUBSTITUTE FOR LEGAL INTERPRETIONS, WHICH MAY ULTIMATELY ARISE CONCERNING THE CONSTRUCTION OF THE STATUTE OR THE REGULATIONS.

#### **Bid Form**

## East Windsor Department of Public Works Sidewalk Replacement Main Street Warehouse Point

To: Town of East Windsor, Department of Public Works 6 Woolam Road, East Windsor, CT 06088, Broad Brook, CT 06016

From: Name of Bidder:		
Address of Bidder:		

1. The undersigned, having examined the Contract Documents, including the Contract Drawings, Project Description and Instructions to Bidders, and having visited the site and examined the conditions affecting the work, hereby proposes and agrees to furnish all labor, material, equipment and appliances, and to perform operations necessary to complete the work as required by said proposed Contract Documents, for the stipulated sum of:

Bidders must fill in "Bid Unit Price" for each bid item. Extend all prices to two decimals.

ITEM NO.	ITEM DESCRIPTION	UNIT	BID UNIT PRICE
1	5" CONCRETE SIDEWALK	SF	\$
2	5" CONCRETE SIDEWALK RAMP	SF	\$
3	8" REINFORCED CONCRETE SIDEWALK	SF	\$
4	BITUMINOUS CONCRETE DRIVEWAY	SY	
5	PROCESSED AGGREGATE BASE	CY	\$
6	LOAMING AND SEEDING	SY	

- A. The undersigned understands that there may be changes, omissions, or modification in the work, and that appropriate adjustments will be made to the Contract price in accordance with the Contract Documents. The undersigned understands that the Owner reserves the right to accept or reject any or all bids, and to waive all formalities, any irregularities, and accept the Bid deemed to be in the Owner's best interest.
- B. Bid prices shall not include any sales, excise or other taxes for which the Owner is not liable. Town of East Windsor is the awarding authority. The Bidder agrees to hold the above pricing for sixty (60) days.
- C. The Bid security in the sum of: 5% OF TOTAL BID is to become the property of the Town in the event the above forms are not executed within the time set forth above, as

caused thereby. D. The undersigned acknowledges receipt of addendum numbers: E. The undersigned understands and agrees to comply with and be bounded by the Instructions to the Bidders used for this work. F. This Bidder hereby agrees to being work immediately upon receipt of the official Notice to Proceed and to substantially complete the work within sixty (60) days thereafter. In submitting this bid, it is agreed that this bid may not be withdrawn for a period of thirty (30) days from the date of bid opening. Respectfully Submitted By: (Signature) Name (Please Print): SEAL Company: \_\_\_\_ (If Bid is by a Corporation) Business Address: Business Phone: ( )\_\_\_\_\_ Business Fax: (\_\_\_) Email Address: License No.: License Type: Type of Business Entity: (Corporation, co-partnership, individual, etc.) Individual members of firm: A. List subcontractors to be used and identify the work they will perform, or attach a separate

liquidated damages, and not as a penalty for the delay and additional expense to the Town

President of Corporation:		
Secretary of Corporation:		
Corporation is organized i	under law of the State of:	
Bid dated this	_ day of	, 2013.

END OF BID FORM

#### **DESCRIPTION**

"Concrete Sidewalk" of the type specified includes the construction of concrete sidewalk on a prepared processed aggregate base course in conformance with the lines, grades, dimensions and details as shown on the Plans, or as directed by the Engineer. It shall also include the sawcutting, removal and disposal of existing sidewalk, steps, ramps or pavement within the excavation limits for "Concrete Sidewalk".

"Concrete Sidewalk and Curb Monolithic" includes the construction of concrete curb and sidewalk, monolithically poured, on a prepared processed aggregate base course in conformance with the lines, grades, dimensions and details as shown on the Plans, or as directed by the Engineer. It shall also include the sawcutting, removal and disposal of existing sidewalk, steps, ramps or pavement within the excavation limits for "Reinforced Concrete Sidewalk".

"Reinforced Concrete Sidewalk" of the type specified includes the construction of concrete sidewalk reinforced with welded wire fabric on a prepared processed aggregate base course in conformance with the lines, grades, dimensions and details as shown on the Plans, or as directed by the Engineer. It shall also include the sawcutting, removal and disposal of existing sidewalk, steps, ramps or pavement within the excavation limits for "Reinforced Concrete Sidewalk".

"Concrete Sidewalk Ramp" of the size and type specified, includes the construction of a concrete ramp on a prepared processed aggregate base course in conformance with the lines, grades, dimensions and details as shown on the Plans, or as directed by the Engineer. It shall also include the sawcutting, removal and disposal of existing sidewalk, steps, ramps or pavement within the excavation limits and installation of detectable warning tiles for "Concrete Sidewalk Ramp".

#### **MATERIALS**

#### 1. Concrete

- a. The concrete furnished shall conform in respects to composition, transportation, mixing and placing, to Class "F" Concrete, 4,000 psi as specified in Section M.03.01 of Form 818 or as modified herein.
- b. Test concrete in accordance with AASHTO or ASTM Standard Test Methods as listed herein.

- c. All concrete mixes shall include air entraining and water reducing admixtures and, as needed, a retarder or accelerator. All admixtures must be on the Connecticut DOT approved list.
- d. Entrained air contents shall be maintained as follows:

Nominal Max	Average Air
Aggregate Size	Content
3/8"	7.5%
1/2"	7.0%
3/4"	6.0%

A range of  $\pm$  1.5 % from the required average is permissible for field tests.

Slump at the point of placement shall be  $4" \pm 1$ ".

e. No additional materials will be added to the concrete mix at the job site without the prior approval of the Engineer.

#### 2. Reinforcing

a. Welded Wire Mesh: WWM shall be used in all driveways and specified sidewalk locations. The WWM shall be W1.4xW1.4 and conform to the latest AASHTO M 55M/M 55-94 "Standard Specifications for Welded Steel Wire Fabric for Concrete Reinforcement."

Written requests may be made to substitute synthetic fibers such as Fibermesh or approved equal for welded wire mesh with written approval of the Engineer. The addition rate shall be 1.5 lb/cu yard.

- b. Smooth Metal Dowels: shall be 5/8" in diameter and 18 inches in length. All metal dowels shall conform to the requirements of AASHTO M31-92, Grade 60.
- c. Deformed Bars: Deformed bars shall conform to AASHTO M31-92, Grade 60.

#### 3. Construction/Isolation Joint Material

Joint material shall be one-half (2) inch in thickness, equal in width to the slab thickness and conform to AASHTO M33-93, Asphaltic Expansion Joint Materials.

#### 4. Forms

The forms used shall be straight and firmly supported and staked to the line and grades as shown on the plans or as directed by the Engineer. The forms shall be free from warp and shall be of sufficient strength to resist springing out of shape. All forms shall be cleaned and oiled before use.

#### 5. Curing Materials

A liquid membrane curing compound such as Masterkure by Master Builders or approved equal and meeting AASHTO M148-91 shall be applied in accordance with the manufacturer's instructions over the completed concrete surface area.

#### 6. Process Aggregate Base (Broken Angular Stone)

Processed aggregate base shall conform to the requirements of "Processed Aggregate Base" elsewhere in these Specifications.

#### 7. Granite Stone Transition Curb

Granite stone transition curb and associated concrete and mortar shall conform to the requirements of "Granite Stone Curb" elsewhere in these Specifications.

#### 8. <u>Detectable Warning Strips</u>

Prefabricated detectable warning surface tile (2' x 3') to be furnished by the Contractor.

#### **CONSTRUCTION DETAILS**

#### 1. Excavation

Excavation, including the removal and disposal of any type of existing sidewalk, curb, ramp, steps or pavement, shall be made to the required depths below the finished grade as shown on the plans or as directed. All soft and yielding material shall be removed and replaced with suitable material.

#### 2. Processed Aggregate Base (Broken Angular Stone)

The base course shall be placed in layers not to exceed six inches (6") in depth and to such a depth that after compaction it shall be at the specified depth below the finished grade of the walk.

#### 3. Bituminous Concrete

Driveway apron shall be 2" bituminous concrete HMA S.05 with 8" process aggregate base and compacted.

#### 4. Forms

Forms shall be straight, free from warp and of sufficient strength to resist springing from the pressure of the concrete. Forms shall be of minimum 5" depth and shall have a flat surface on the top. Forms shall be securely staked, braced and held firmly to the required line and grade and shall be sufficiently tight to prevent leakage of mortar. All forms shall be cleaned and oiled or wetted before concrete is placed against them. Sheet metal templates one-eighth (1/8) inch in thickness, of the full depth and width of the walk, shall be spaced at intervals of fifteen feet (15') or as directed by the Engineer. If the concrete is

placed in alternate sections, these templates shall remain in place until concrete has been placed on both sides of the template. As soon as the concrete has obtained its initial set, the templates shall be removed.

#### 4. Joints

a. <u>Construction Joints</u>: At maximum intervals of thirty fee (30'), install a construction joint as detailed on the drawings. Install dowels as shown on the drawings. Minimum embedment on each side of the joints shall be six inches (6"). All dowels shall be straight, square on the ends with no burrs. Located at the center of the slab on 12" centers. Bars must be carefully aligned and square with the form face. Prevent bonding to the concrete on one side of the joint by using a plastic sleeve over the dowel or coat with an approved bond breaker. Alternate protected end on each side of the joints.

Dowels are also to be installed between new and existing concrete slabs. Where new or repaired walks abut existing concrete sidewalks, the contractor shall drill holes measuring ¾ of an inch in diameter and twelve (12) inches in depth at 24" on centers into the existing concrete slab. The dowels, dipped in a liquids asphalt and coated with an approved bond breaker or plastic sleeve shall be set into the existing sidewalk slab prior to the placement of concrete. The dowels are to be level with the latitude pitch of the sidewalk and shall conform to the details of these specifications. Any variations in dowel installation procedures must be approved by the Engineer.

Other locations to which dowels may be required will be directed by the Engineer.

- b. <u>Control Joints</u>: Follow joint spacing as shown on the drawings. At intervals of approximately fifteen (15) feet, a full control joint shall be provided. A tooled joint, to the depth of 3/8 of an inch, shall be installed at approximately five (5) foot intervals along the sidewalk. The resulting areas should be as square as practical. All joints shall be installed using straight guides set at right angles to the longitudinal direction of the walk.
- c. <u>Isolation Joints</u> will be installed wherever concrete is placed against already installed concrete of structures such a curbing, building, or other, previously existing paving.

If it becomes necessary to adjust the locations, horizontal or vertical dimensions of the above listed items due to interference with utilities or for other valid reasons, the Contractor, with the approval of the Engineer, shall construct said items to the modified dimensions and locations.

#### 5. Concrete Placement and Finishing

- a. Subgrade preparation: The subgrade shall be approved by the Engineer prior to placement of concrete. The grade will be free of soft areas, roots, rubble and large stones. It shall be fully compacted and graded to provide the specified slab thickness within  $\pm \frac{1}{4}$ ".
- b. Forms: Align forms as shown on drawings and secure to provide straight edges and uniform curves. Remove only after the concrete has gained sufficient strength to prevent shipping or raveling of the edges.
- c. Where required, install welded wire mesh. Support the mesh on concrete bricks or other supports so that it will remain in the upper third of the slab.
- d. Moisten the subgrade before starting concrete placement to eliminate water loss.
- e. Place continuously, using construction joints at locations shown on the drawings or as approved by the Engineer. If an interruption occurs of a duration that may cause a cold joint, install a construction joint as described in this specification.
- f. Water may be added to the truck mixer to adjust the slump when the discharge begins, only if the concrete is below the specified water cement ratio and maximum slump upon arrival at the job site. Water shall not be added to the batch at any later time. If higher slumps are required, use a high range water reducer such as Rheobuild 1000 by Master Builders or equal as approved by the Engineer.
- g. Screed the concrete grade, bull float or darbie, consolidate formed edges by spading with a hand float, and leave until edging can being. Allow to hard sufficiently so that a foot leaves only a slight imprint. Floating should not begin until the water sheen has disappeared. The surface shall be worked and floated with a wooden, aluminum or magnesium float or finishing machine using float blades. The outside edges of the slab shall be edged with one-quarter (1/4) inch radius tool.

The slab shall then be broomed crosswise with a fine hair broom leaving the surface free from all tool marks.

h. Immediately upon the disappearance of the water sheen following the final finishing and before any marked dehydration or checking occurs, the curing compound shall be applied using an approved spraying device. The sprayer shall deliver a find spray with uniform coverage. Coverage rate shall be that recommended by the curing compound manufacturer.

- i. The Contractor shall have on the job, at all times, sufficient polyethylene film or waterproof paper to provide complete coverage in the event of rain. Protect the surface if rain occurs before final set or use for curing in the event of a breakdown of the spray equipment.
- j. If rain falls on the newly coated sidewalk before the curing film as dried sufficiently to resist damage, or if the film is damaged in any other manner, the contractor shall reapply same. Treated surfaces shall be protected from all foot or vehicular traffic for a sufficient period of time to prevent damage.

#### 6. Reinforcing

Reinforcing of the type specified shall be used in all concrete sidewalk ramps and at concrete sidewalks which cross driveways. Welded wire fabric for concrete reinforcement shall be embedded at mid-depth in the slab.

#### 7. Detectable Warning Strip

All sidewalk ramps shall have detectable warning strips as shown on the Plan or as directed by the Engineer. The detectable warning strip shall be set directly in poured concrete according to the Plans, the manufacturer's specifications or as directed by the Engineer. The Contractor shall place two 25 pound concrete blocks or sandbags on each tile to prevent the tile from floating after installation in wet concrete. Detectable warning tiles shall be furnished by the Contractor.

#### 8. Special Conditions

- a. Low Temperature Placements: No concrete is to be placed when air temperature is below 50°F unless additional precautions are taken and prior approval is given by the Engineer. The Engineer must approve all placements below 50°F. No concrete will be placed on frozen sub-grade or at temperatures below 20°F. Concrete exposed to temperatures below 40°F after pavement must be protected through the use of insulating blankets, a six (6) inch layer of straw that is maintained in a dry condition by a covering of plastic sheeting, or other appropriate methods. Any concrete placed during cold weather that is damaged because of freezing shall be replaced at the Contractor's own expense.
- b. Special consideration for high temperature placements and repaid drying conditions should be discussed with the Engineer. No additional materials will be added to the concrete mix at the job site without the prior approval of the Engineer.
- c. Where reconstruction of an existing approach walk is required, the reconstructed portion of the approach walk shall match the existing approach walk in color, texture and appearance.

#### 9. Curb Transitions

Curb transitions shall be provided when sidewalk ramps are adjacent to existing and proposed curb. Granite stone curb transitions shall be provided adjacent to granite curb and concrete curb transitions shall be provided adjacent to concrete curb and bituminous concrete curb unless approved otherwise by the Engineer.

#### 10. Backfilling and Removal of Surplus Material

The sides of all finished concrete work shall be backfilled to the limits shown on the drawings or as directed by the Engineer, with suitable material thoroughly compacted and finished flush with the top of the concrete. All surplus material shall be removed and the site left in a neat and presentable condition to the satisfaction of the Engineer.

#### 11. Protection

The Contractor shall protect newly poured concrete surfaces so as to prevent damage from falling objects, vandalism, etc. The Contractor shall repair or remove and replace any damaged or defaced concrete surface at his own expense. Determination to repair or remove and replace will be the sole discretion of the Engineer.

#### 12. <u>Utility Adjustments</u>

If an existing utility box, valve box or manhole is located within the limits of the new sidewalk or ramp, the Contractor shall be responsible for the coordination and scheduling with the owner of the facility, for the adjustment of the facility to grade, if necessary.

#### 13. Signs

The Contractor shall provide temporary support posts during the construction of new sidewalk for all existing signs with the limits of construction. The Contractor shall also provide a PVC sleeve set flush to the grade of the new sidewalk, at the locations directed by the Engineer, to accommodate sign posts in the new sidewalk.

#### **MEASUREMENT**

"Concrete Sidewalk" will be measured by the actual number of square feet of completed and accepted concrete sidewalk of the type specified.

"Concrete Sidewalk and Curb Monolithic" will be measured by the actual number of square feet of completed and accepted concrete sidewalk of the type specified measured from face of curb to back of walk.

#### MEASUREMENT (continued)

"Reinforced Concrete Sidewalk" will be measured by the actual number of square feet of completed and accepted reinforced concrete sidewalk of the type specified.

"Concrete Ramps" will be measured by the actual number of square feet of completed and accepted concrete ramps of the type specified.

The following items will not be measured separately for payment, but shall be considered as included in the unit price bid for "Concrete Sidewalk", "Reinforced Concrete Sidewalk", "Textured Concrete Sidewalk", "Concrete Sidewalk and Curb Monolithic" or "Concrete Sidewalk Ramp" of the type specified:

- 1. Excavation
- 2. Processed Aggregate Base (Broken Angular Stone)
- 3. Dowels and other reinforcement
- 4. Removal of existing sidewalks, steps, ramps, or roadway within the sidewalk or ramp excavation limits
- 5. Installing Detectable warning strips
- 6. Installing curb transitions
- 7. Adjustment of existing valve boxes, utility boxes, or handholes to grade
- 8. Providing temporary sign supports for existing signs during construction
- 9. PVC sleeves for signs

#### **PAYMENT**

This work will be paid for at the contract unit price per square foot for "Concrete Sidewalk", "Reinforced Concrete Sidewalk", "Concrete Sidewalk and Curb Monolithic" or "Concrete Sidewalk Ramp", of the type specified, complete in place, which prices shall include all excavation; formation of subgrade; removal and disposal of existing sidewalk, steps, ramps and roadway; processed aggregate base; granite stone or concrete curb transitions; backfill, reinforcement, expansion joints, curing disposal of surplus material, installation of detectable warning tiles, PVC sleeves, temporary support of existing signs, equipment, tools, materials and labor incidental thereto.

Granular fill or processed aggregate base used to replace unsuitable material or used as borrow material to bring the sidewalk subbase to grade will be paid under the items "Granular Fill" or "Processed Aggregate Base" elsewhere in these Specifications. Granular fill and processed aggregate base will only be paid for if directed by the Engineer.

#### **PAYMENT** (continued)

The resetting of existing signs on new sign supports within the limits of sidewalk or ramp construction will be paid under these Specifications.

Item No.	Pay Item	Pay Unit
1	5" Concrete Sidewalk	Square Feet
2	5" Concrete Sidewalk Ramp	Square Feet
3	8" Reinforced Concrete Sidewalk	Square Feet
4	Bituminous Concrete Driveway	Square Yard
5	Processed Aggregate Base	Cubic Yard
6	Loaming and Seeding	Square Feet

#### PROCESSED AGGREGATE BASE

#### **DESCRIPTION**

"Processed Aggregate Base" shall consist of furnishing and installing processed aggregate base as a foundation for bituminous concrete roadways, concrete sidewalks, curbs, driveways and other items where shown on the Plans in accordance with these Specifications and in conformity with the lines, grades, compacted thickness and typical cross-section as shown on the Plans.

#### **MATERIALS**

At the discretion of the Engineer, contractors shall supply copies of material test results, certified by an approved testing laboratory.

The materials for this work shall conform to the following requirements:

1. <u>Gradation</u>: Coarse and fine aggregates shall be combined and mixed by approved methods so that the resulting material shall conform to the following gradation requirements:

Square Mesh Sieves	Percent Passing By Weight
Pass 2-1/4"	100
Pass 2"	95 - 100
Pass 3/4"	50 - 75
Pass 1/4"	25 - 45
Pass #100	2 - 12

#### MATERIALS (continued)

2. <u>Coarse Aggregate</u>: Coarse aggregate shall be broken stone. The broken angular stone shall be the product resulting from the artificial crushing of rocks, boulders, or large cobblestones, substantially all faces of which have resulted from the crushing operation. It shall be free of soft disintegrating pieces, mud, dirt, organic or other injurious material.

When tested by means of the Los Angeles Machine, using AASHTO Method T-96, the coarse aggregate shall not have a loss of more than 50 percent.

When tested by magnesium sulfate solution for soundness, using AASHTO Method T104, the coarse aggregate shall show a loss of not more than 15 percent at the end of 5 cycles.

3. <u>Fine Aggregate</u>: Fine aggregate shall be natural sand, stone sand, screenings or any combination thereof.

The fine aggregate shall be limited to material 95 percent of which passes a No. 4 sieve having square openings and not more than 8 percent of which passes a No. 200 sieve. The material shall be free from clay, loam and deleterious materials.

4. Plasticity: When screenings or any combination of screening and natural sand or any combination of stone sand and natural sand are used, the following requirements shall apply:

When the fraction of dry Sample passing the No. 100 mesh sieve is 6% or less by weight, no plastic limit test will be made.

When the fraction of the dry sample passing the No. 100 mesh sieve is greater than 6 percent and not greater than 10 percent by weight, that fraction shall not have sufficient plasticity to permit the performing of the plastic limit test, using AASHTO Method T 90.

When the fraction of the dry sample passing the No. 100 mesh sieve is greater than 10 percent by weight, the sample shall be washed; and additional material passing the No. 100 mesh sieve shall be determined by AASHTO Method T 146, except that the No. 100 mesh sieve shall be substituted for the No. 40 mesh sieve where the latter is specified in AASHTO Method T 146. The combined materials that have passed the No. 100 mesh sieve shall not have sufficient plasticity to permit the performing of the plastic limit test using AASHTO Method T 90.

#### **CONSTRUCTION DETAILS**

Coarse aggregate shall be broken stone. Only one type of coarse aggregate shall be used on a project unless otherwise permitted by the Engineer.

#### CONSTRUCTION DETAILS(continued)

Prior to placing the bottom course of the processed aggregate base, the prepared subbase shall be maintained true to line and grade. After the aggregate is spread, it shall be thoroughly compacted and bound by use of equipment approved the Engineer. Water may be used during the compaction and bind operation.

When the bottom course has been completed, as specified above, the top course aggregate shall be spread over it to such thickness that, after final compaction and binding, the total thickness of the two courses will equal that thickness specified for the completed base. The top course shall be spread, compacted and bound exactly as specified above for the bottom course.

The final surface of the subbase course shall be fine graded so that, after final compaction and just prior to placement of base or pavement courses, the surface elevation shall not vary more than one-quarter inch above or below the design grade at any location. The surface shall be completed to the above tolerance and approved by the Engineer prior to any work at a given location to place an overlying course. If after approval, the course becomes displaced or disturbed in any way for any reason, the Contractor shall repair and regrade the damage to the satisfaction of the Engineer prior to placing the overlying course. All repaired sections shall be recompacted until they meet the requirements as stated herein.

#### **MEASUREMENT**

"Processed Aggregate Base", as required, shall be measured for payment by the cubic yard.

#### **PAYMENT**

The cost of "Processed Aggregate Base" will be paid for at the Contract unit price per cubic yard for processed aggregate base.

#### **PERFORMANCE BOND**

Bond No.\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS:
THATas Principal,
Hereinafter called "PRINCIPAL," and
As Surety, hereinafter called "SURETY," are held and firmly bound unto the Town of
East Windsor, Connecticut, as Obligee, hereinafter called "TOWN," in the amount of
Dollars, (\$), for the payment whereof
PRINCIPAL and SURETY bind themselves, their heirs, executors, administrators, successors
and assigns, jointly and severally, firmly by these presents.
WHEREAS, PRINCIPAL has by written Contract dated
entered into a Contract with TOWN for
Which Contract is by reference made a part hereof, and is hereinafter referred to as the
"CONTRACT."

NOW, THEREFORE, the condition of this obligation is such that, if PRINCIPAL shall promptly and faithfully perform said CONTRACT, and shall certify in writing that all wages paid under said CONTRACT to any mechanic, laborer or workman were equal to the rates of wages customary or then prevailing for the same trade or occumpation in the Town of East Windsor, then this obligation shall be null and void, otherwise it shall remain in full force effect.

Whenever PRINCIPAL shall be, and declared by the TOWN to be in default under the CONTRACT, the TOWN having performed its obligations thereunder, the SURETY may promptly remedy the default, or shall promptly:

- 1. Complete the CONTRACT in accordance with its terms and conditions; or
- 2. Obtain a bid or bids for submission to the TOWN for completing the CONTRACT in accordance with its terms and conditions, and upon determination by the TOWN and SURETY of the lowest possible bidder, arrange for a CONTRACT between such bidder and the TOWN, and make available as work progresses (even though there should be a

default or a succession of defaults under the CONTRACT or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Price; but not exceeding, including other costs and damages for which the SURETY may be liable hereunder, the amount set forth in the first paragraph hereof. The term, "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by the TOWN to PRINCIPAL under the CONTRACT and any amendments thereto, less the amount properly paid by the TOWN to the PRINCIPAL.

No right of action shall accrue on this bond to or for use of any person or corporation other than the TOWN named herein or the heirs, executors, administrators or successors of TOWN.

Signed and sealed this	day of	, A.D., 20	
In the Presence of:			
		(SEAL)	
	By:		
		(SURETY)	
By:			

#### **LABOR AND MATERIAL PAYMENT BOND**

		Bor	nd No
Note:		neously with another bond in favor of the tioned for the full and faithful performa	
	KNOW ALL MEN BY THE	ESE PRESENTS:	
are hell hereing the am (\$bind the am are hell are am are	CIPAL," andld and firmly bound unto the after called "TOWN," for the bount of	as Principal, hereinafter as Surety, hereinafter care Town of East Windsor, Connecticut, as use and benefit of claimants as herein Dollars, for the payment whereof PRINCIPA ors, administrators, successors, and assistance.	Alled "SURETY," Obligee, below defined, in L and SURETY
	WHEREAS, PRINCIPAL h Contract with Town for ne "CONTRACT."	as by written Contract dated made a part hereof, and is	entered hereinafter referred
for use	CIPAL shall pay for all labor	ondition of this obligation is such, that and materials furnished to himself or hiork, and used therein, then, this obligation deffect.	s Subcontractors
1989) hereun	ns 49-41, 49-41a, 41-49b, 49- of the State of Connecticut ar	that this bond is executed pursuant to the 42 and 49-43 of the General Statutes (on any other applicable laws, and the riginal by said sections and said other and at length herein.	C.G.S.A. and Supp. ghts and liabilities
Signed	and sealed this	day of	, A.D., 20
In the	Presence of:		
		(PRINCIPAL)	(SEAL)
		By:	
		(SURETY)	
D.,,,			

#### MAIN STREET WAREHOUSE POINT SIDEWALK REPLACEMENT

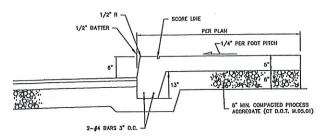




### MAP FOR REFERENCE ONLY NOT A LEGAL DOCUMENT

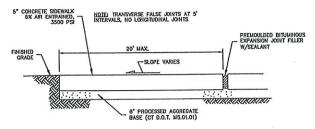
Town of East Windsor, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 5/21/2021 Data updated 5/15/2020 Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.



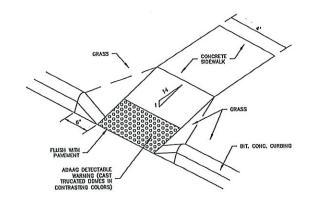
NOTE: FINISH PER TYPICAL SIDEWALK DETAIL

### INTEGRAL SIDEWALK & CURB DETAIL



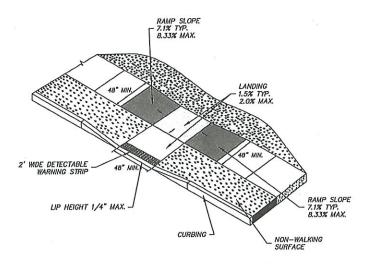
NOTE: EXPANSION JOINTS TO BE PLACED BETWEEN ADJACENT SLABS, AT BUILDING LINE, AT CURBS, OR AT PENETRATING STRUCTURES,

### TYPICAL SIDEWALK DETAIL

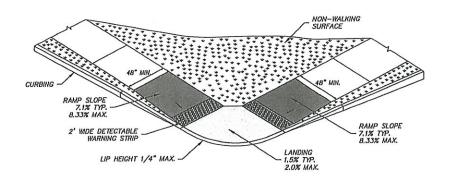


#### SIDEWALK RAMP TYPE A

NOT TO SCALE



### SIDEWALK RAMP TYPE B



SIDEWALK RAMP TYPE C

