TOWN OF GLASTONBURY INVITATION TO BID

BID # DATE & TIME REQUIRED

GL-2010-23 New London Turnpike Sidewalk Extension October 13th 2009 at 11:30 a.m.

The Town of Glastonbury is currently seeking bids for the construction of approximately 1,600 linear feet of four-foot-wide concrete sidewalk along the south side of New London Turnpike from Full Circle to the Route 17 southbound off-ramp overpass.

<u>Prevailing Wages:</u> The contractor must comply with Section 31-53 of the Connecticut General Statutes as amended, including annual adjustments in prevailing wages.

Bid Forms may be obtained at the Office of the Purchasing Agent, Town Hall, 2155 Main Street, Glastonbury, Connecticut 06033, (second level) and via the Town's website at www.glastonbury-ct.gov.

The Town reserves the right to waive informalities or reject any part of, or the entire bid, when said action is deemed to be in the best interests of the Town. All Sealed Bids must be submitted to the Office of the Purchasing Agent no later than the time and date indicated. All bids will be publicly opened and read.

Mary F. Visone Purchasing Agent

BID #GL-2010-23

NEW LONDON TURNPIKE SIDEWALK EXTENSION INVITATION TO BID

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NEW LONDON TURNPIKE SIDEWALK EXTENSION INVITATION TO BID

- 1. Sealed bids (one original and one copy) on the attached Bid Forms will be received at the Office of the Purchasing Agent, Town Hall, 2155 Main Street, Glastonbury, Connecticut 06033 (second level). At the designated time of opening, they will be publicly opened, read, recorded and placed on file.
- 2. Whenever it is deemed to be in the best interest of the Town, the Town Manager, Purchasing Agent or designated representative shall waive informalities in any and all bids. The right is reserved to reject any bid, or any part of any bid, when such action is deemed to be in the best interest of the Town of Glastonbury.
- 3. The award will be on the basis of bid total cost unless otherwise specified.
- 4. Bids will be carefully evaluated as to conformance with stated specifications.
- The envelope enclosing your bid should be clearly marked by bid number, time of bid opening, and date.
- 6. Specifications must be submitted complete in every detail and, when requested, samples shall be provided. If a bid involves any exception from stated specifications, they must be clearly noted as exceptions, underlined, and attached to the bid.
- 7. The Bid Documents contain the provisions required for the requested item. Information obtained from an officer, agent, or employee of the Town or any other person shall not affect the risks or obligations assumed by the Bidder or relieve him/her from fulfilling any of the conditions of the bid.
- 8. Each Bidder is held responsible for the examination and/or to have acquainted themselves with any conditions at the job site which would affect their work before submitting a bid. Failure to meet this criteria shall not relieve the Bidder of the responsibility of completing the bid without extra cost to the Town of Glastonbury.
- 9. Any bid may be withdrawn prior to the above-scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No Bidder may withdraw a bid within sixty (60) days after the actual date of the opening thereof. Should there be reasons why a bid cannot be awarded within the specified period, the time may be extended by mutual agreement between the Town and the Bidder.
- 10. Each bid must be accompanied by a bid bond payable to the Town for ten percent (10%) of the total amount of the bid. The bid bond of the successful Bidder will be retained until the payment bond and performance bond have been executed and approved, after which it will be returned. A certified check may be used in lieu of a bid bond. The Town of Glastonbury will not be liable for the accrual of any interest on any certified check submitted. Cashier's checks will not be accepted.
- 11. A 100% Performance and Payment bond are required of the successful bidder. This bond shall cover all aspects of the specification and shall be delivered to the Purchasing Agent prior to the issuance of a purchase order. The Performance and Payment Bond will be returned upon the delivery and acceptance of the bid items.
- 12. The Bidder agrees and warrants that in the submission of this sealed Bid, they will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religion, national origin, sex, or physical disability including, but not limited to blindness, unless it is shown by such Bidder that such disability prevents performance of that which must be done to successfully fulfill the terms of this sealed Bid or in any manner which is prohibited by the laws of the Untied States or the State of Connecticut: and further agrees to

NEW LONDON TURNPIKE SIDEWALK EXTENSION INVITATION TO BID

provide the Human Relations Commission with such information requested by the Commission concerning the employment practices and procedures of the Bidder. <u>An Affirmative Action Statement will be required by the successful Bidder.</u>

- 13. Bidder agrees to comply with all of the latest Federal and State Safety Standards and Regulations and certifies that all work required in this bid will conform to and comply with said standards and regulations. Bidder further agrees to indemnify and hold harmless the Town for all damages assessed against the Town as a result of Bidder's failure to comply with said standards and/or regulations.
- 14. All correspondence regarding any purchase made by the Town of Glastonbury shall reference the Town's purchase order number. Each shipping container shall clearly indicate both Town purchase order number and item number.
- 15. Bidder is required to review the Town of Glastonbury Code of Ethics adopted July 8th, 2003 and effective August 1, 2003. Bidder shall acknowledge that they have reviewed the document in the area provided on the bid / proposal response page (BP). The selected Bidder will also be required to complete and sign an Acknowledgement Form prior to award. The Code of Ethics and the Consultant Acknowledgement Form can be accessed at the Town of Glastonbury website at www.glastonbury-ct.gov. Upon entering the website click on Bids & RFPs, which will bring you to the links for the Code of Ethics and the Consultant Acknowledgement Form. If the Bidder does not have access to the internet a copy of these documents can be obtained through the Purchasing Department at the address listed within this bid.

16. Non-Resident Contractors:

The Town is required to report names of non-resident (out-of-State) contractors to the State of Connecticut, Department of Revenue Services (DRS) to ensure that Employment Taxes and other applicable taxes are being paid by Contractors. **Upon award, all non-resident contractors must furnish a five percent (5%) sales tax guarantee bond (State Form AU-766) or a cash bond for five percent (5%) of the total contract price (State Form AU-72) to DRS even though this project is exempt from most sales and use taxes.**

See State Notice to Non-Resident Contractors SN 2005 (12). If the above bond is not provided, the Town is required to withhold five percent (5%) from the contractor's payments and forward it to the State DRS.

The contractor must promptly furnish to the Town a copy of the **Certificate of Compliance** issued by the State DRS.

- 17. Bidder shall include on a sheet(s) attached to its proposal a complete disclosure of all past and pending mediation, arbitration and litigation cases that the bidder or its principals (regardless of their place of employment) have been involved in for the most recent five years. Please include a statement of the issues in dispute and their resolution. Acceptability of Bidder based upon this disclosure shall lie solely with the Town.
- 18. Bidder or its principals, regardless of their place of employment, shall not have been convicted of, nor entered any plea of guilty, or nolo contendere, or otherwise have been found civilly liable or criminally responsible for any criminal offense or civil action. Bidder shall not be in violation of any State or local ethics standards or other offenses arising out of the submission of bids or proposals, or performance of work on public works projects or contracts.
- 19. It is the responsibility of the bidder to check the Town's website before submitting bid for addendums posted prior to bid opening.

NEW LONDON TURNPIKE SIDEWALK EXTENSION INVITATION TO BID

20. **Prevailing Wage Rates:**

Wage Rate Determination for this Project from the State of Connecticut is included in the bid documents. Certified payrolls for site labor shall be filled out weekly and submitted monthly to the Town on the correct State form (See Project Manual). The Town reserves the right to, without prior notice, audit payroll checks given to works on site in order to ascertain that wages and fringe benefits are being paid as required by the State of Connecticut. Contractor to comply with Connecticut General Statutes Section 31-53, as amended. Please make special note of the State requirement to adjust wage and fringe benefit rates on each July 1st following the original published rates. These revised rates are available via the internet. See State material attached.

NOTE that bidder is to include in its bid proposal all costs required by such annual increases in the PREVAILING RATES. No Escalation Clauses are to be included in the bidder's proposal and no Escalation Clauses will be in the Contract Agreement. Bidder is to anticipate any future increases and include these costs in its quotation.

Contractor's invoices will not be paid if certified payrolls are incomplete, incorrect or not received in a timely manner.

All Apprentices must be registered with the State of Connecticut and their number shall not exceed the number allowed by law. Otherwise, all workers must be paid at least the Journeyman rate listed including benefits.

OSHA SAFETY AND HEALTH CERTIFICATION:

<u>Effective July 1, 2009:</u> Any Mechanic, Laborer, or Worker, who performs work in a classification listed on the prevailing wage rate schedule on any public works project covered under C.G.S. Section 31-53, both on site and on or in the public building, must have completed a federal OSHA Safety and Health course within the last 5 years.

IMPORTANT: Failure to comply with general rules may result in disqualification of the Bidder.

NOTE: For technical questions regarding this bid, please contact Stephen M. Braun, Assistant Town Engineer, at (860) 652-7743.

01.00 **WORKMANSHIP, MATERIALS AND EMPLOYEES** 01.01 Wherever in this contract the word "Engineer" is used, it shall be understood as referring to the Town Engineer/Manager of Physical Services of the Town of Glastonbury acting personally or through any assistants duly authorized. 01.02 The entire work described herein shall be completed in accordance with the plans and specifications to the full intent and meaning of the same. Unless otherwise specified, all materials incorporated in the permanent work shall be new, and both workmanship and material shall be of good quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials. 01.03 The wording "furnish", "install", "construct", "furnish and install", or any similar terms, unless specifically noted to the contrary, shall include all labor, materials, water, tools, equipment, light, power, transportation, and any other services required for the completion of the work. 01.04 The Contractor shall at all times enforce strict discipline and good order among his employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work assigned to him. **SUPERINTENDENT** 02.00 02.01 The Contractor shall keep on the work during its progress, in the absence of the Contractor, a competent Superintendent. The Superintendent shall be acceptable to the Engineer and shall fully represent the Contractor. All directions given to the Superintendent shall be binding as if given to the Contractor. 03.00 PRECONSTRUCTION MEETING 03.01 A Preconstruction Meeting will be held with the Engineer, Contractor, and any private utility company prior to commencing any work. The Engineer shall arrange the meeting based on a mutually convenient time. **PERMITS** 04.00 04.01 Other than local permits, all permits, licenses, and fees required for the performance of the Contract work shall be secured and paid for by the Contractor. 04.02 A State Department of Transportation Encroachment Permit will be required for the project and shall be obtained by the Contractor at no additional cost to the Town. 05.00 **PROPERTY ACCESS** 05.01 The Contractor shall take all proper precautions to protect from injury or unnecessary interference, and provide proper means of access to abutting property where the existing access is cut off by the Contractor. 05.02 The Contractor shall take all proper precautions to protect persons from injury or unnecessary inconvenience and leave an unobstructed way along the public and private

places for travelers, vehicles, and access to hydrants.

O5.03 The Contractor shall make arrangements with the adjacent property owners for such trespass as he may reasonably anticipate in the performance of the work. All such arrangements shall be reported, in writing, to the Engineer.

06.00 PROTECTION OF THE PUBLIC AND OF WORK AND PROPERTY

- O6.01 The Contractor shall continuously maintain adequate protection of all work from damage, and shall take all reasonable precautions to protect the Town from injury or loss arising in connection with the Contract.
- O6.02 The Contractor shall adequately protect adjacent private and public property as provided by law and the Contract Documents.
- The Contractor shall make good any damage, injury, or loss of his work and to the property of the Town resulting from lack of reasonable protective precautions.

07.00 EXISTING IMPROVEMENTS

- 07.01 The Contractor shall conduct his work so as to minimize damage to existing improvements. Except where specifically stated otherwise in the specifications, drawings, or as directed by the Engineer, it will be the responsibility of the Contractor to restore to their original condition, as near as practical, all improvements on public or private property. This shall include:
 - a. Property within and adjacent to the side of installation such as shrubs, walks, driveways, fences, etc.
 - b. Utility mains, ducts, poles, and services. The Contractor is hereby notified that utilities, if/where shown on the plans, are at approximate locations. These locations are subject to possible errors in the source of information and errors in transcription. The Contractor shall make certain of the exact location of all mains, ducts, poles, and services prior to excavation.

08.00 SEPARATE CONTRACTS

O8.01 The Engineer reserves the right to let other contracts in connection with this work. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate his work with theirs. Wherever work being done by the Town of Glastonbury forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Engineer to secure the completion of the various portions of the work.

09.00 INSPECTION OF WORK

- 09.01 The Town shall provide sufficient personnel for the inspection of the work.
- 09.02 The Engineer shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for such access and for inspection.

- 09.03 If the specifications or the Engineer's instructions require any work to be specially tested or approved, the Contractor shall give the Engineer timely notice of its readiness for inspection and, if the inspection is by another authority other than the Engineer, of the date fixed for such inspection. Inspections by the Engineer shall be made promptly. If any work should be covered up without approval or consent of the Engineer, it must, if required by the Engineer, be uncovered for examination and properly restored at the Contractor's expense.
- O9.04 Reinspection of any work may be ordered by the Engineer. If such work is found to be in accordance with the Contract Documents, the Town shall pay the cost of reinspection and replacement. If such work is not in accordance with the Contract Documents, the Contractor shall pay such cost.

10.00 RIGHT TO INCREASE OR DECREASE WORK

10.01 The Town shall have the right to increase or decrease the amount of work herein specified as may be required.

11.00 RIGHT OF ENGINEER TO STOP WORK FOR WEATHER CONDITIONS

Should the work, in the opinion of the Engineer, be in danger by reason of inclemency of weather, or could not be finished in time to prevent such danger, the Contractor shall cease operations upon order of the Engineer, and shall not resume them until ordered to do so by the Engineer when the weather conditions are favorable. The Contractor shall, upon such orders, discontinue work, remove all materials or appliances for or in use upon the work, and place the streets in proper condition for use by the public during the time the work is suspended as herein provided, without cost to the Town.

12.00 CONTRACTOR TO BE RESPONSIBLE FOR IMPERFECT WORK OR MATERIALS

Any faithful work or imperfect material that may be discovered before the acceptance and the payment of the work shall be corrected upon the order of the Engineer. The acceptance and payment of the work does not in any manner relieve the Contractor of his obligation to construct work in the proper manner and the use of materials herein specified.

13.00 TOWN MAY NOTIFY CONTRACTOR IF WORK IS NOT CARRIED ON SATISFACTORILY

- If, in the opinion of the Engineer, the Contractor is not proceeding with the work at a sufficient rate of progress so as to finish in the time specified, or has abandoned said work, or is not complying with the terms and stipulations or the Contract and specifications, the Engineer may serve notice on the Contractor to adopt such methods as will ensure the completion of the work in the time specified.
- If, within five days after the Engineer has notified the Contractor that his work is not being carried on satisfactorily as before mentioned, the Engineer shall have the right to annul the Contract and manage the work under the direction of the Engineer, or re-let, for the very best interest of the Town as a new contract, the work under said new Contract shall be considered the responsibility of the defaulting Contractor.

13.03 Additional costs incurred over and above the original Contract shall be borne by the Performance Bond.

14.00 DEDUCTIONS FOR UNCORRECTED WORK

- 14.01 If the Engineer deems it inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made therefor.
- The Contractor shall promptly remove from the premises all materials condemned by the Engineer as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute his own work in accordance with the Contract and without expense to the Town, and shall bear the expense of making good all work by other contractors destroyed or damaged by such removal or replacement.
- 14.03 If the Contractor does not remove such condemned work and materials as promptly as possible after written notice, the Engineer may remove them and store the materials at the expense of the Contractor.

15.00 CLEANING UP

- 15.01 The Contractor must remove all debris of every description as the work progresses and leave the surroundings in a neat and orderly condition to the satisfaction of the Engineer.
- Upon completion, and before acceptance and final payment, the Contractor shall remove from the site all equipment, forms, surplus material, rubbish and miscellaneous debris and leave the site in a neat and presentable condition.

16.00 ROYALTIES AND PATENTS

The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Town of Glastonbury harmless from loss on account thereof, except that the Town of Glastonbury shall be responsible for all such loss when a particular manufacturer, product, or process is specified by the Town of Glastonbury.

01.00 NOTICE TO CONTRACTOR

- 01.01 Intent of Contract: The intent of the Contract is to prescribe a complete work or improvement that the Contractor undertakes to do, in full compliance with the specifications, plans, special provisions, proposal, and Contract. The Contractor shall perform all work in close conformity with the lines, grades, typical cross-sections, dimensions, and other data shown on the plans or as modified by written orders, including the furnishing of all materials, implements, machinery, equipment, tools, supplies, transportation, labor, and all other things necessary to the satisfactory prosecution and completion of the project.
- The Contractor is hereby alerted to the fact that the State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 816 (Form 816") and supplements thereto are to be considered part of the Contract Documents. The Form 816 shall not be provided by the Town and any cost associated therewith shall be the responsibility of the Contractor. In case of any discrepancy between the Contract Drawings or Specifications and the Form 816, the matter shall immediately be submitted to the Engineer. The Engineer shall have sole authority in resolving any discrepancies.
- Much time and effort has gone into this project in an effort to minimize impact on trees and adjacent properties. Extreme care shall be taken by the Contractor to honor commitments made by the Town. Prior to doing any work, the Contractor should meet with the Engineer to become familiar with the conditions encountered and commitments made.

02.00 COMMUNICATIONS

- O2.01 All notices, demands, requests, instructions, approvals, proposals, and claims must be in writing.
- O2.02 Any notice to, or demand upon, the Contractor shall be sufficiently given if delivered at the office of the Contractor stated on the signature page of the Agreement (or at such other office as the Contractor may, from time to time, designate) in a sealed, postage-prepaid envelope or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office.
- All papers required to be delivered to the Town shall, unless otherwise specified in writing to the Contractor, be delivered to the Town Engineer/Manager of Physical Services, 2155 Main Street, Glastonbury, CT 06033, and any notice to, or demand upon, the Town shall be delivered at the above address in a sealed, postage-prepaid envelope or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to such office or to such other representatives of the Town, or to such other address as the Town may subsequently specify in writing to the Contractor for such purpose.
- O2.04 Any such notice shall be deemed to have been given as of the time of actual delivery or, in case of mailing, when the same should have been received in due course of post or, in the case of telegrams, at the time of actual receipt, as the case may be.

03.00 PARTIAL USE OF IMPROVEMENTS

O3.01 The Town may, at its election, give notice to the Contractor and place in use those sections of the work that have been completed, inspected and can be accepted as complying with the Contractor Documents and if, in its opinion, each such section is reasonably safe and fit for the use and accommodation for which it was intended, provided:

- a. The use of such sections of the work shall not materially impede the completion of the remainder of the work by the Contractor.
- b. The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.
- c. The use of such sections shall in no way relieve the Contractor of his liability due to having used defective materials or to poor workmanship.
- d. The period of guarantee shall not begin until the date of the final acceptance of all work required under this Contract.

04.00 INSURANCE

O4.01 The Contractor shall, at its own expense and cost, obtain and keep in force during the entire duration of the Project or Work the following insurance coverage covering the Contractor and all of its agents, employees and sub-contractors and other providers of services and shall name the **Town its employees and agents as an Additional Insured** on a primary and non-contributory basis to the Bidders Commercial General Liability and Automobile Liability policies. **These requirements shall be clearly stated** in the remarks section on the Contractors Certificate of Insurance. Insurance shall be written with Carriers approved in the State of Connecticut and with a minimum Best's Rating of A-. In addition, all Carriers are subject to approval by the Town. Minimum Limits and requirements are stated below:

- a. Worker's Compensation Insurance:
 - Statutory Coverage
 - Employer's Liability
 - \$100,000 each accident/\$500,000 disease-policy limit/\$100,000 disease each employee
- b. Commercial General Liability:
 - Including Premises and Operations, Products and Completed Operations, Personal and Advertising Injury, Contractual Liability and Independent Contractors
 - Limits of Liability for Bodily Injury and Property Damage Each Occurrence: \$1,000,000
 Aggregate: \$2,000,000
 (The Aggregate Limit shall apply separately to each job.)
 - A Waiver of Subrogation shall be provided.

NEW LONDON TURNPIKE SIDEWALK EXTENSION SPECIAL CONDITIONS

c. Automobile Insurance:

- Including all owned, hired, borrowed, and non-owned vehicles
- Limit of Liability for Bodily Injury and Property Damage Per Accident: \$1,000,000
- O4.02 The Contractor shall direct its Insurer to provide a Certificate of Insurance to the Town before any work is performed. The Certificate shall specify that the Town shall receive 30 days advance written notice of cancellation or non-renewal. The Certificate shall evidence all required coverage including the Additional Insured and Waiver of Subrogation. The Contractor shall provide the Town copies of any such policies upon request.
- INDEMNIFICATION: To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Town and its consultants, agents, and employees from and against all claims, damages, losses and expenses, direct, indirect or consequential (including but not limited to fees and charges of engineers, attorneys and other professionals and court and arbitration costs) arising out of or resulting from the performance of the Contractor's work, provided that such claim, damage, loss or expense is caused in whole or in part by any negligent act or omission by the Contractor, or breach of its obligations herein or by any person or organization directly or indirectly employed or engaged by the Contractor to perform or furnish either of the services, or anyone for whose acts the Contractor may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

05.00 WORK BY OTHERS

O5.01 Private utilities, contractors, developers or other parties may be expected to be working within the Contract area during this Contract. It shall be the responsibility of the Contractor to coordinate his work with the work being done by others in order that the construction shall proceed in an efficient and logical manner. The Contractor shall have no claim or claims whatever against the Town, the Engineer, or other parties due to delays or other reasons caused by the work by others or his failure to coordinate such work.

06.00 CONTRACTOR'S WORK AND STORAGE AREA

The Contractor shall contact the Town to determine if any specific locations will be designated, or gain its approval prior to using any area for storage of equipment, materials and trailers during the period of this Contract. The Contractor shall confine his work/storage area to the limits as designated or approved and shall be responsible for the security of the work/storage area. Upon completion of the Contract, the Contractor shall remove all equipment and materials, except as otherwise specified, and restore the site to its original condition as approved by the Engineer and at no cost to the Town.

07.00 **DISPOSAL AREA**

07.01 The Tryon Street Bulky Waste Facility will be available to the Contractor, at no charge, for disposal of materials that are accepted at that facility. The Town's waste disposal quidelines for this facility may be found on the Town's website under the **Departments**

menu by selecting Sanitation - Refuse Disposal - Bulky Waste Facility or by using the following link: http://www.glastonbury-ct.gov/index.aspx?page=900. The Contractor is required to obtain a disposal area for all other unsuitable or surplus materials at no cost

to the Town.

08.00 **DUST CONTROL**

08.01 During the progress of the work, the Contractor shall conduct his operations and maintain the area of his activities so as to minimize the creation and dispersion of dust. If the Engineer decides that it is necessary to use water or calcium chloride for more effective dust control, the Contractor shall furnish and spread the material, as directed, without additional compensation.

09.00 MAINTENANCE / GUARANTEE PERIOD

09.01 The Contractor shall be held responsible to the Town for maintenance for a minimum of one-year following completion of all work under this Contract with respect to defects, settlements, etc.

PROTECTION OF EXISTING UTILITIES 10.00

- 10.01 Before starting any excavation, the Contractor shall submit to the Engineer plans or details showing the proposed method the Contractor will use to support and protect all existing utilities during construction. The furnishing of such plans and details shall not serve to relieve the Contractor of any responsibility for the proper conduct of the work.
- 10.02 There will be no extra payment for submitting plans or details for supporting and protecting all existing utilities during construction.

TIME FOR COMPLETION/NOTICE TO PROCEED 11.00

- Within ten (10) calendar days after the date of the Notice of Award, the Contractor must 11.01 provide the appropriate bond and insurance certificates to the Town Purchasing Agent and must be issued a Purchase Order for the Project prior to initiating any work.
- The work under this Contract shall within ten (10) days of the Notice of Award, and shall 11.02 be substantially complete by November 30th, 2009. Since the normal timeframe for fall seeding ends on October 15th, an additional thirty (30) days of contract time will be allowed in the spring starting on April 1, 2010 for final restoration of the project site.
- 11.03 The Town of Glastonbury intends to begin construction immediately on this project. Bidders should include costs in their bid response as required to comply with the Form 816 and the Project bid documents for concrete work during cold weather.

12.00 LIQUIDATED DAMAGES

As actual damages for any delay in completion of the work that the Contractor is required to perform under this Contract are impossible to determine, the Contractor and the Sureties shall be liable for and shall pay to the Town the sum of \$100.00 as fixed, agreed and liquidated damages for each calendar day of delay from the above-stipulated completion, or completion as modified in writing by both parties, until such work is satisfactorily completed and accepted.

13.00 SCHEDULE OF DRAWINGS

The Contractor is hereby alerted that the plan set entitled "Proposed Sidewalk from Full Circle to Route 17 Underpass, Glastonbury Connecticut", including five (5) sheets prepared by the Town of Glastonbury Engineering Division is to be considered part of these specifications.

14.00 CHANGES IN THE WORK

The Town reserves the right to perform portions of the work in connection with these plans and specifications. The reduction in the work to be performed by the Contractor shall be made without invalidating the Contract. Whenever work is done by the Town contiguous to other work covered by this Contract, the Contractor shall provide reasonable opportunity for the execution of the work and shall properly coordinate his work with that of the Town.

15.00 LAYOUT OF WORK

The Town shall provide stake-out of the work in accordance with the plans or as directed by the Engineer. The Contractor shall protect all stakes from damage or destruction and shall be responsible to assure that the grade stakes have not been altered prior to actual construction. The Town shall replace grade stakes that have been removed, at no cost to the Contractor, if their removal was caused by reasons beyond reasonable care and protection by the Contractor. If it is determined by the Engineer that the Contractor did not provide reasonable protection, the cost of restaking will be deducted from any amounts due the Contractor in the performance of the work.

16.00 REMOVAL AND STORAGE OF MATERIALS AND STRUCTURES FOUND ON THE WORK

All salvable materials, including topsoil, gravel, fill materials, etc. and structures, including drainage pipes, catch basins and manhole frames and covers, guide railing, etc. that are not to remain in place or that are not designated for use in the work, shall be carefully removed by the Contractor and stored at such places as directed by the Engineer. All salvable materials removed and stored shall remain the property of the Town. The Engineer shall determine the materials or structures to be salvaged.

17.00 PROSECUTION AND PROGRESS

17.01

The Contractor shall give the Engineer a seven-day advance written notice of construction activities that will alter traffic patterns that result in lane shifts, detours, temporary closures of lane(s), permanent closure of lane(s), or lane reductions. This advance notification will allow the Town to publish news releases and/or provide public radio announcements to inform the public of revised traffic patterns or possible traffic delays. Failure of the Contractor to provide such timely notice shall be considered a breach of Contract and will subject the Contractor to stop work orders until such time as the seven-day notice has been satisfied.

18.00 EXTRA AND COST PLUS WORK

18.01 Extra and cost plus work shall be governed by Article 1.04.05 and Article 1.09.04 of the Form 816.

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002.0 PREPARATION OF SITE

- O02.1 <u>General</u>: The Contractor shall furnish all labor, materials, tools, and equipment necessary and shall do all work to prepare the site as indicated on the drawings and as herein specified.
- O02.2 <u>Tree Removal</u>: Removal of trees as indicated on the plans shall be performed by workman skilled in the area of tree removal under the supervision of a Connecticut Licensed Arborist. The Contractor shall mark all trees, shrubs, and plants to be removed in accordance with the plans and these specifications. The Engineer shall have 7 days to field review the markings and make any adjustments prior to the start of the clearing operation.

Trees and shrubs within the right-of-way or within any property owned by the Town of Glastonbury that are designated for removal must be posted as such by the Glastonbury Tree Warden (Mr. Greg Foran of the Parks and Recreation Department, 652-7686) for a period of 10 days prior to removal. No trees or shrubs within the Town of Glastonbury right-of-way shall be cut or removed until such posting has been completed and subsequent approval given by the Tree Warden.

In general, no trees, etc. in public streets and highways are to be cut or damaged in any way except as noted on the plans. Trees, bushes, and growing crops on other lands may be cut, removed, or trimmed only to the extent provided in the terms of the rights-of-way or access rights possessed by the Town, and also only within the limits and in the manner, if any, indicated by the Engineer or by the drawings or Special Conditions.

- 002.3 Tree Trimming: Trimming of trees by a Connecticut Licensed Arborist is included under this item as required for clearance of construction equipment and pedestrians below the tree canopy. When the canopy of a tree must be elevated for clearance above the proposed sidewalk, trimming shall be done around the entire circumference of the tree.
- Tree Protection and Care of Property: The Contractor shall install high visibility construction fence at the drip line of the tree canopy as shown on the plans and as directed by the Engineer to protect existing trees that are not to be cut from damage during construction. The Engineer, at his sole discretion, may also direct the Contractor to enclose the trunks of trees adjacent to his work that are not to be cut with substantial wooden boxes of such height as may be necessary to protect them from injury from piled material, from equipment, from his operations, or otherwise due to his work. Excavating machinery and cranes shall be of suitable type and be operated with care to prevent injury to trees not to be cut, and particularly to overhanging branches and limbs.

Branches, limbs, and roots shall not be cut except by permission of the Engineer. All cutting shall be smoothly and neatly done without splitting or crushing. In case of cutting or unavoidable injury to branches, limbs, and trunks of trees, the cut or injured portions shall be neatly trimmed and covered with an application of grafting wax or tree-healing paint, as directed.

Cultivated hedges, shrubs, and plant that might be injured by the Contractor's operations shall be protected by suitable means or shall be dug up and temporarily replanted and maintained. After the construction operations have been substantially completed, they shall be replanted in their original positions and cared for until growth is re-established. If cultivated hedges, shrubs, and plants are injured to such a degree as to affect their growth or diminish their beauty or usefulness, they shall be replaced by items of kind and quality at least equal to the kind and quality existing at the start of the work.

On paved surfaces, the Contractor shall not use or operate tractors, bulldozers, or other power-operated equipment, the treads of wheels that are so shaped as to cut or otherwise injure such surfaces.

Olearing: From areas to be cleared, the Contractor shall cut or otherwise remove all trees, saplings, brush, vines, and other vegetable matter such as snags, sawdust, bark, etc., and refuse. The area to be cleared shall be confined to the width shown on the plans or as stipulated in the Proposal. Vines, brush, and similar undergrowth shall be cut as close to the ground as practicable. Trees may be cut leaving a longer stump to facilitate their removal by power-operated equipment. No trees shall be cut or trimmed unless they are so indicated on the drawings.

Clearing shall also include removal and disposal of all items shown on the plans to be removed, or directed by the Engineer to be removed as part of the project, including, but not limited to, removal and disposal of existing concrete sidewalk, concrete steps, drainage structures, fences, and any and all other structures or materials not specifically listed in the Bid Proposal but required to be removed to accomplish the work.

All road signs, mail boxes, etc., shall be removed and reset as directed.

O02.6 Grubbing: Grubbing shall consist of the complete removal of all tree stumps and roots larger than two inches in diameter to a minimum depth of 12-inches below the finish grade surface. All excavations made below the finished surface by the removal of trees, stumps, etc. shall be filled with suitable material and thoroughly compacted in such a manner that its surface will conform to the surrounding surface.

Stump grinding shall be used for stump removal where the potential for damage to adjacent improvements or underground utilities exists due to the excavation of stumps, or as directed by the Engineer. The requirements for grubbing noted above shall also apply to stump grinding operations.

- 002.7 <u>Disposal</u>: All materials removed during trimming, tree removal, and clearing and grubbing operations shall be disposed of by the Contractor in a manner satisfactory to the Engineer.
- Payment: Except as provided otherwise in the Bid Proposal or Special Conditions, this work shall be paid for at the Contract Lump Sum Price for "Preparation of Site", which price shall include protection of existing trees and vegetation, tree removal and tree trimming under the supervision of a Connecticut Licensed Arborist, clearing and grubbing within the limits of the work, stump grinding, removal and disposal of trees, roots, stumps, brush, concrete steps, and other objects, leveling of areas to accommodate the work, and all labor, materials, tools, and equipment necessary thereto.

105.0 PERMANENT PAVEMENT REPAIR

105.1 <u>General</u>: The Contractor shall furnish all labor, materials, tools, and equipment necessary and shall construct all permanent pavement to replace pavement removed or damaged by his operations, as herein specified and as directed.

Prior to excavation in paved areas, the Contractor shall cut the surface of the existing pavement in as straight a line as possible on both sides of the proposed trench for the entire length of the job.

Any existing reinforced concrete base shall be cut neatly with a masonry saw. The existing reinforcement shall be left projecting out twelve (12) inches from the concrete and the new reinforcement shall be tied to it. Existing reinforcement shall be cut by a mechanical method, and shall not be burned off. It shall be saved by bending it out of the way during construction.

In the replacement of pavement, the Contractor shall not feather the edges between the new and existing pavement. Materials and methods of construction shall conform, insofar as applicable, to the Form 816.

- Process Stone Base Course: The Contractor shall furnish and place the pavement base course on not less than ten (10) inches compacted thickness of an acceptable processed stone. Care should be taken to prevent the separation of the fines from the aggregate during dumping and grading operations. The Contractor shall apply water to the base, as needed, to obtain the desired compaction.
- 105.3 Permanent Paving: Permanent pavement shall consist of three (3) inches of bituminous class 1 top course and 6 inches of bituminous class 4 binder course over the previously prepared processed stone base.

All joints shall be sealed with a hot bituminous asphalt sealer approved by the Engineer.

All binder courses shall conform to the Form 816, Section 4.06, and all top courses shall conform to the Form 816, Section 4.06.

All depth measurements shall be considered to be compacted depths. Bituminous material shall be compacted to 90% density.

The bituminous base course may be installed in two equal lifts of three-inches (3") thick and the top course in two lifts of 1.5" inches thick unless the method of compaction of the bituminous base course can achieve compaction to the desired density of one lift. The determination shall be made by the Engineer.

The Contractor shall remove and acceptably dispose of all excavated material before proceeding with the remainder of the work.

Permanent pavement, in all cases, shall be applied so that the whole roadway or paved area shall have a true and uniform surface, and the pavement shall conform to the proper grade and cross-section with a smooth transition to existing pavement.

Surface Maintenance: Until the expiration of the guarantee period, the Contractor shall maintain surfacing placed under this Contract and shall promptly correct any defect such as cracks, depressions, and holes that may occur. At all times, the surfacing shall be kept in a safe and satisfactory condition for traffic. If defects occur in surfacing

constructed by the Contractor, the Contractor shall remove all bituminous concrete and base course as necessary to properly correct the defect. The Contractor shall replace the base course and bituminous concrete as specified herein.

105.5 Measurement and Payment: Permanent pavement repairs will be measured and paid by the square yard complete in place to the depth as indicated within these specifications or as directed by the Engineer. This item shall include removal of temporary pavement, excavation, process stone base course, bituminous concrete binder and top courses, saw cutting, compaction, and all other labor, equipment, and materials incidental thereto.

113.0 BITUMINOUS CONCRETE LIP CURBING

113.1 <u>General:</u> This item shall conform to Section 8.15 BITUMINOUS CONCRETE LIP CURBING, of the Form 816.

201.0 CONCRETE SIDEWALKS

201.1 <u>General</u>: The Contractor is to construct sidewalks to lines and grades as shown on the drawings or at locations as directed by the Engineer. The sidewalks shall be of monolithic construction and five inches thick, except at industrial and commercial driveways where it shall be eight inches thick and reinforced with 6" x 6" 10/10 steel mesh. Sidewalk construction shall include the removal of existing and construction of new house lateral walks where new sidewalk grades make it necessary. At street corners where the intersection is rounded with a radius of less than 25 feet to the curb, the sidewalk slabs will be a minimum of five feet in length and constructed of five-inch thick concrete. The sidewalk shall pitch to the street at a slope of 1/4-inch per foot or as directed by the Engineer.

Pedestrian sidewalk ramps are to be constructed to the lines and grades shown on the plans at locations directed by the Engineer, and shall be a minimum of five inches thick. This work shall also include furnishing and installing Detectable Warning Strips in the locations and to the dimensions and details shown on the plans or as ordered by the Engineer.

- 201.2 Forms: The forms used shall be five-inch steel or 2" x 6" wood firmly supported and staked to the line and grade given 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.
- 201.3 <u>Concrete</u>: The concrete furnished shall conform with respect to composition, transportation, mixing and placing, to Class F Cement Concrete 4,000 PSI, as specified by the State of Connecticut Department of Transportation in its latest specification and revisions. An approved air-entraining admixture shall be used to entrain 5% to 7% air in the concrete.
- 201.4 <u>Detectable Warning Strips</u>: The Detectable Warning Strip shall be a prefabricated detectable warning surface tile as manufactured from Engineered Plastics Inc. 300 International Drive, Suite 100 Williamsville, NY 14221, telephone number (800) 682-2525 or the approved equal from ADA Fabricators, INC. P.O Box 179 North Billerica, MA 01862 telephone number (978) 262-9900. The tile shall conform to the dimensions shown on the plans and have a brick red homogeneous color throughout in compliance with Federal Standard 595A Color #22144 or approved equal.

The Detectable Warning Strip shall be set directly in poured concrete according to the plans and the manufacturer's specifications or as directed by the Engineer. The Contractor shall place two 11.34 Kg concrete blocks or sandbags on each tile to prevent the tile from floating after installation in wet concrete.

201.5 <u>Dowels</u>: Smooth dowels, 5/8-inch in diameter, measuring 24 inches in length shall be installed within all expansion and contraction joints, concrete driveway aprons and the last end section of each sidewalk slab poured at the end of each working day.

Dowels are also to be installed between new and existing concrete slabs. Where new or repaired walks abut up against existing concrete sidewalks, the Contractor shall drill two holes measuring 3/4-inches in diameter and 12 inches in depth into the existing concrete slab. The dowels, dipped in a liquid asphalt or grease and wrapped in aluminum foil, 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 details of these specifications.

Smooth metal dowels shall be 5/8-inch in diameter and 24 inches in length. All metal dowels shall conform to the requirements of ASTM A615 Grade 60.

- 201.6 Expansion Joints: At maximum intervals of 15 feet, an expansion joint shall be placed. The material for expansion joints shall be either 1/4-inch thick cork asphalt or 3/8-inch thick asphalt impregnated bonded cellular fiber, or approved equal. Expansion joints of the same material shall also be placed at points abutting existing structures.
- 201.7 <u>Surface Finish</u>: The surface finish shall be struck off, forcing coarse aggregate below mortar surface. After strike-off, the surface shall be worked and floated with a wooded, aluminum, or magnesium float followed by steel troweling. The slab shall then be broomed cross-wise with a fine hair broom. The outside edges of the slab shall be edged with a 1/4-inch radius tool. All edging lines shall be removed.
- 201.8 <u>Curing</u>: The Contractor shall use a liquid membrane-forming curing compound. The curing compound shall be similar or equal to Demicon "Cure Hard" with fugitive dye and shall meet the latest ASTM Specification C-156. Waterproof paper or plastic membrane are acceptable alternatives.

Newly constructed sidewalk surfaces shall be protected from all foot or vehicular traffic for a period of seven days. 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.

- Temperature: No concrete is to be placed on frozen base material or when air temperature is below 40°F, or at 45°F and falling, unless prior approval is given by the Engineer. In the event weather conditions may be such that concrete that is not completely cured is subject to freezing, the Contractor shall provide a minimum of a sixinch layer of hay, straw, or thermal blankets for protection. Any concrete laid during cold weather that is damaged by freezing shall be the responsibility of the Contractor and shall be replaced at his expense.
- 201.10 <u>Basis of Payment</u>: Concrete Sidewalk shall be measured and paid for at the Contract unit price per square foot as contained in the Bid Proposal, which price shall include the Base Course Underneath Sidewalks, excavation, and all other materials and all labor, tools, and equipment necessary for completion of the work.

Pedestrian Ramps shall be measured and paid for as a unit at the Contract unit price for each Pedestrian Ramp as contained in the Bid Proposal, which price shall include the Base Course Underneath Sidewalks, Excavation, Detectable Warning Strip, and all other materials and all labor, tools, and equipment necessary for completion of the work.

204.0 GRADING AND TOPSOILING

- 204.1 <u>Description</u>: This work shall consist of furnishing, placing, and shaping topsoil in areas shown on the plans where directed by the Engineer. The topsoil shall be placed to the depth stated in the Contract or specifications.
- 204.2 <u>Material</u>: The material shall conform to the requirements of Article M.13.01.1 of the Form 816.
- 204.3 Construction Methods: The areas on which topsoil is to be placed shall be graded to a reasonably true surface and cleaned of all stones, brickbats, and other unsuitable materials. After areas have been brought to proper subgrade and approved by the Engineer or his agent, loam shall be spread to a depth as indicated in the Contract, or to a depth of no less than four inches, with due allowance made for settlement. All stones, roots, debris, sod, weeds, and other undesirable material shall be removed from the topsoil. After shaping and grading, all trucks and other equipment shall be excluded from the topsoiled area to prevent excessive compaction. The Contractor shall perform such work as required to provide a friable surface for seed germination and plant growth prior to seeding.

During hauling and spreading operations, the Contractor shall immediately remove any material dumped or spilled on the shoulders or pavement.

It shall be the Contractor's responsibility to restore to line, grade, and surface all eroded areas with approved material and to keep topsoiled areas in acceptable condition until the completion of the construction work.

Wherever subgrade material is sand, gravel, or other previous material, and elsewhere as required by the Engineer, the Contractor shall place a four-inch layer of clay or other impervious material on the subgrade material before placing loam.

204.4 <u>Payment</u>: This work will be measured for payment by the number of square yards of area on which the placing of the topsoil has been completed and the work accepted.

The limits of payment shall be to the slope limits as shown on the plans. In the absence of slope limits, the maximum area of measurement shall be the area extending two feet behind the sidewalk and the area between the sidewalk and edge of pavement. No payment shall be made outside of these limits unless the disturbance was directed or approved by the Engineer. No payment shall be made for areas disturbed for staging, storage of materials, or other area disturbed for the convenience of the Contractor.

This work will be paid for at the Contract unit price per square yard for "Grading and Topsoil", which price shall include all materials, equipment, tools, labor, and work incidental thereto.

205.0 TURF ESTABLISHMENT

205.1 <u>Description</u>: The work included under this item shall consist of furnishing and placing pre-emergent fertilizer, seed, and mulch on all areas to be seeded as shown on the plans, or where directed by the Engineer.

205.2 Materials:

The seeding materials for this work shall conform to the requirements of Section M.13 of the Form 816, and Table 205.1.

Pre-emergent fertilizer shall be comparable to Tupersan Seed Starter 11-23-10, plus Crabgrass Control.

- 205.3 <u>Construction Methods</u>: Construction methods shall be those established as agronomically acceptable and feasible, and that are approved by the Engineer.
- 205.4 <u>Preparation</u>: Areas shall be made friable and receptive to seeding by methods approved by the Engineer. In all cases, the final prepared area shall meet the lines and grades for such surface as shown on the plans, or as directed by the Engineer. In no event will seeding be allowed on a hard or crusted soil surface.

All areas shall be reasonably free from weeds taller than three inches. Removal of weed growth from the slope areas shall be by approved methods, including hand mowing, which does not rut or scar the slope surface or cause disruption of the slope line and grade. Seeding on level areas shall not be permitted until substantially all weed growth is removed. Seeding on slope areas shall not be permitted without removal or cutting of weed growth except by written permission of the Engineer.

205.5 <u>Seeding Season</u>: The normal seasonal dates for seeding shall be as follows:

Spring: March 15th to June 15th Fall: August 15th to October 15th

If the Contactor seeds outside the seasonal periods, any additional materials furnished and placed to establish growth shall be done at the Contractor's expense. The Contractor must also reseed, mulch, and repair any areas seeded, whether out-of-season or not, that are damaged by fire, erosion, or any other cause, as directed by the Engineer at no expense to the Town.

Areas of disturbed soil that will contribute to air and water pollution shall be established to the designated vegetation cover as soon as feasible or when directed by the Engineer.

205.6 <u>Seeding Methods</u>: Seed shall be uniformly applied by any agronomically acceptable and feasible method approved by the Engineer.

Seed for lawn areas shall be fresh and clean and free from weed seed, seed of grasses other than those specified, and free from chaff and other extraneous material. Seed shall be raked in with a fine tooth rake. After seed is sown, the surface of the ground shall be thoroughly rolled with a light roller suitable for sown seed. All seeded areas shall be watered and maintained to the satisfaction of the Engineer. Within two weeks after grass seed has come up, any areas where grass seed has not germinated properly, or where the surface has been washed or damaged in any way, shall be reseeded as before.

Normal seed mixtures shall be applied at the rate of 200 pounds per acre. Fertilizer shall be uniformly placed at the rate of 600 pounds per acre.

- 205.7 <u>Mulching</u>: Areas seeded shall be mulched unless otherwise ordered by the Engineer. Wood chip mulch shall not be used on seeded areas. Unless otherwise shown on the plans or called for in the Special Provisions, mulch will be applied according to Table 205-2. The mulch will be anchored according to Table 205-3.
- 205.8 <u>Compaction</u>: The Contractor shall keep all equipment and vehicular and pedestrian traffic off areas that have been seeded to prevent excessive compaction and damage to young plants. Where such compaction has occurred, the Contractor shall rework the soil to make a suitable seed bed, then reseed and mulch such areas with the full amount of the specified materials at no extra charge to the Town.
- 205.9 <u>Cleanup</u>: This work will not be considered complete until all clean-up operations are complete. This shall include the removal of all debris resulting from the seeding operations on shoulders, pavement, or adjacent property, public and private. The Contractor shall be required to shape, grade, and establish vegetative cover in accordance with the specifications on all areas disturbed outside the normal limits of construction.

Any area in the project where ground cover is destroyed due to the construction operations must have a new ground cover established by means of seeding, fertilizing, and mulching, if necessary, as directed by the Engineer.

- 205.10 <u>Warranties and Certificates</u>: The Contractor shall supply the Engineer with all warranties or certificates furnished with the seed mixture or fertilizer prior to use of the material.
- 205.11 Payment: This work will be measured for payment by the number of square yards of surface area actually covered by seeding, fertilizer, and mulch when 90% of seeded area has achieved four-inch growth as specified.

The limits of payment shall be to the slope limits as shown on the plans. In the absence of slope limits, the maximum area of measurement shall be the area extending two feet behind the sidewalk and the area between the sidewalk and edge of pavement. No payment shall be made outside of these limits unless the disturbance was directed or approved by the Engineer. No payment shall be made for areas disturbed for staging, storage of materials, or other area disturbed for the convenience of the Contractor.

This work will be paid for at the Contract unit price per square yard for "Turf Establishment", which price shall include all materials, maintenance, equipment, tools, labor, and work incidental thereto.

TABLE 205-1 SEED MIXTURES, RATES AND DATES

SEED MIXTURE 4/	PERCENT BY WT.	SEEDING RATES		SEEDING <u>DATES</u>	SPECIAL ADAPTATION
		_LBS. PER 1,000 SQ. FT.	LBS. PER PER ACRE		
Red Fescue <u>3</u> / Perennial Ryegrass	60 40	1	40	April 1 – June 15 Aug. 1 – Sept. 30	No Mow Areas Droughty Areas
Reed Canary Grass Redtop	80 20	1	50	April 1 – June 15 Aug. 15 – Sept. 15	Wildlife or Wet Area
Red Fescue <u>2/</u> Kentucky Bluegrass Perennial Bluegrass	70 20 10	2	80	April 1 – June 15 Aug. 15 – Oct 15	High Maintenance Lawn Areas
Ky 31 Tall Fescue Birdsfoot Trefoil	70 30	1	40	April 1 – June 1	No Mow Areas Wet Areas

These are minimum seeding rates and should be increased if adverse conditions exist.

¹⁰ lbs. of Birdsfoot Trefoil may be added to this mixture.

^{1/} 2/ 3/ 4/ Ky 31 Tall Fescue may be used in place of Red Fescue. May add 5 lbs. of Perennial Ryegrass for quick fall cover.

TABLE 205-2

GUIDE TO MULCH MATERIAL

MULCH MATERIAL	QUALITY	APPLICATION R. Per 1,000 sq. ft.	ATES Per Acre	REMARKS
Hay or Straw	Air dried, free from undesirable seeds	75-100 lbs. or 2-3 bales	1.5-2 tons 90-110 bales	Use straw where mulch effect is to be maintained for more than three months. Subject to wind blowing unless kept moist or tied down. Good for critical area erosion control. Spread uniformly, leave 10-20% of ground exposed. Excellent for seedbed protection until vegetation is established. Salt marsh hay where available is usually free of weed seeds.

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TABLE 205-3

MULCH ANCHORING GUIDE

ANCHORING METHOD OR MATERIAL	REMARKS AND HOW TO APPLY
Jute Netting, Twisted	Good for watering or critical erosion area seedbed stabilization. Use pegs or special stables to anchor netting and prevent blowing. Generally available in 4-foot wide rolls and up to 300-foot long.
Peg and Twine	Used to anchor hay, straw, or other mulch which may be subject to blowing. Drive 8 to 10 inch long wooden pegs into soil on 3 or 4 foot centers. Secure mulch to soil surface by stretching twine between the pegs in a criss-cross and square pattern on each. Make two or more turns with twine around each stake. Drive pegs flush with soil if mowing and maintenance is planned.

206.0 SEDIMENTATION CONTROL SYSTEM

206.1 <u>General</u>: This item shall conform to Section 2.19 of the Form 816.

207.0 SEDIMENT CONTROL SACK

- 207.1 <u>General:</u> This work shall consist of furnishing, installing, maintaining, and removing a sedimentation control sack for control of sediment entering catch basins within the project area as directed by the Engineer or as shown on the contract drawings.
- 207.2 <u>Materials:</u> Sediment control sacks shall be Siltsack® as manufactured by SI® Geosolutions or approved equal, and shall be manufactured from a specially designed woven polypropylene geotextile.

The sediment control sack shall be manufactured to fit the opening of the catch basin or drop inlet to be protected. Sediment control sack shall have the following features: two dump straps attached at the bottom to facilitate emptying; lifting loops shall be included as an integral part of the system to be used to lift the sedimentation control sack from the basin; sediment control sack shall have a restraint cord approximately halfway up the sack to keep the sides away from the catch basin walls, this yellow cord is also a visual means of indicating when the sack should be emptied. Once the strap is covered with sediment, sediment control sack should be emptied, cleaned and placed back into the basin.

207.3 <u>Construction Sequence:</u> To install the sediment control sack in the catch basin, remove the grate and place the sack in the opening. Hold out approximately six inches of the sack outside the frame. This is the area of the lifting straps. Replace the grate to hold the sack in place.

When the restraint cord is no longer visible, the sediment control sack is full and should be emptied.

To remove the sediment control sack, take two pieces of 1" diameter rebar and place through the lifting loops on each side of the sack.

To empty the sediment control sack, place it where the contents will be collected. Place the rebar through the lift straps (connected to the bottom of the sack) and lift. This will turn the sedimentation control sack inside out and empty the contents. Clean out and rinse. Return the sedimentation control sack to its original shape and place back in the basin.

The sediment control sack is reusable. Once the construction cycle is complete, the sedimentation control sack shall be removed from the basin and cleaned. The sedimentation control sack shall then be provided to the Town for re-use.

207.4 <u>Basis of Payment:</u> Sediment control sacks shall be paid for as a unit for each sedimentation control sack provided and installed. Maintenance of the sediment control sacks and cleaning after completion of construction as described herein shall also to be included in this bid price.

213.0 EARTHWORK AND GRADING FOR SIDEWALK CONSTRUCTION

- 213.1 <u>General</u>: The Contractor is to exercise caution to prevent unnecessary damage to lawns, trees, bushes, or any other existing improvements. If, in the opinion of the Engineer, existing improvements are damaged due to the carelessness of the Contractor, the same shall be repaired or replaced at the Contractor's expense.
- 213.2 <u>Earthwork</u>: The Contractor shall remove and dispose of grass, rubbish, and other objectionable materials within the limits of the sidewalk construction. The Contractor shall perform all excavation necessary to construct sidewalks to the grades as shown on the construction plans. Excavation shall include the saw cutting, removal, and disposal of bituminous concrete and concrete sidewalks, driveways, and pavements, including curbing and tree roots, where necessary, due to the new sidewalk grade and as shown on the plans or as directed by the Engineer. Existing house lateral walks and driveways adjacent to the sidewalk shall be removed and base graded and prepared for a smooth connection. The Contractor shall remove and dispose of all excess material.

Suitable excavated material shall be re-used within the project limits as directed by the Engineer to form embankment for the sidewalks where required. Embankment formation shall be completed as described in Article 2.02.03 of the Form 816, and shall meet the proposed subgrade elevations described on the plans or directed by the Engineer.

- Grading Existing Topsoil: Upon completion of sidewalk construction, the Contractor is to grade the areas between sidewalks and curbs, if the typical section indicates a grass plot, and disturbed areas back of the sidewalk. The Contractor shall backfill and compact these areas so as to conform to the typical cross-section. The upper four inches of the backfill shall be loam or topsoil, loose and friable and free of sticks, rocks, roots, weeds, or other unsuitable material.
- 213.4 <u>Lawn Restoration</u>: This work will consist of restoring grass areas disturbed in the Contract work. All work will be in conformance with Section 205.0 TURF ESTABLISHMENT.

213.5 <u>Basis of Payment:</u>

Except as provided otherwise below and in the Bid Proposal for "Removal of Pavement", all of the above-described work under the heading of EARTHWORK AND GRADING FOR SIDEWALK CONSTRUCTION shall be included in the Contract unit price for sidewalks or other items associated with the work.

Sawcutting, removal, and disposal of existing bituminous pavement and concrete sidewalk shall be paid for at the contract unit price per square yard for "Removal of Pavement", which price shall include all labor, material, tools, and equipment incidental thereto.

214.0 BASE COURSE UNDERNEATH SIDEWALKS

- 214.1 <u>Description</u>: The Contractor shall make the necessary excavation and furnish material for base construction under sidewalks.
- Material: The material used for base course construction shall conform to the requirements of Section M.02.01 of the Form 816 for broken or crushed stone. It shall consist of sound, tough, and durable stone and shall be free of thin or elongated pieces, lumps of clay, soil, loam, or vegetative matter. All material shall be approved by the Engineer prior to its use.
- 214.3 <u>Construction Method</u>: The material for the base course shall be spread upon the prepared subgrade to such depth as to give a compacted thickness of eight inches. The material shall be uniformly spread in two layers of equal depth in the entire base course excavation and each layer shall be wetted and compacted to a firm even surface with a roller weighing not less than 500 pounds or by use of pneumatic tampers or vibratory compactors.
- 214.4 <u>Basis of Payment</u>: There will be no separate payment for this item. All of the above-described work under the heading "Base Course Underneath Sidewalks" shall be included in the Contract Unit Prices for sidewalks or the item associated thereto.

215.0 PERMANENT DRIVEWAY REPAIRS

215.1 <u>Description</u>: The Contractor shall furnish all labor, tools, material, and equipment to replace all driveway pavement damaged due to the associated construction, as shown on the plans and as directed by the Engineer. This item shall also include the removal and disposal of existing bituminous pavement necessary for driveway replacement work.

215.2 Materials:

The base course shall be processed stone of a quality satisfactory to the Engineer.

Hot laid bituminous concrete for driveway repairs shall be Bituminous Class 2 per Section M.04 of the Form 816.

- 215.3 <u>Construction Methods</u>: Portions of the driveway or driveway aprons to be replaced shall be saw cut, and the existing pavement removed and disposed of by the Contractor. The eight inches of trench immediately below the bottom of the proposed pavement shall be backfilled with processed stone and compacted in four-inch layers. The upper three inches shall be topped by the Contractor with hot bituminous concrete or as required to match the existing pavement, and maintained at grade. The edges shall be painted with an asphalt emulsion prior to the placement of permanent pavement. Hot laid bituminous concrete shall be placed so as to give a three-inch compacted surface, or a surface that has a depth equal to the existing driveway surface, whichever is greater. Compaction shall be made with a power-driven roller. The finished surface shall be free from waves or depressions.
- 215.4 <u>Basis of Payment</u>: Measurement and payment will be based on the Contract Unit Price per square yard of "Permanent Driveway Repairs" complete in place, which price shall include saw cutting, removal and disposal of existing bituminous pavement, all materials (including base materials), labor, tools, and equipment incidental thereto.

220.0 REMOVE AND RESET BUSINESS SIGN AND LIGHTING

- 220.1 Description: Under this item the Contractor shall remove and relocate the existing business sign in front of property located at #530 New London Turnpike as shown on the plans and as directed by the Engineer. The new installation shall consist of erecting the sign in a manner as required to match the existing sign foundation, removal of the old sign foundation as required, relocating associated light fixtures as required to match the new sign location, removing or extending underground conduit as required for the sign lighting fixtures, and making all necessary electrical connections for proper operation. The landscaped area around the sign shall also be restored with bark mulch as required to match the existing condition
- 220.2 <u>Materials:</u> The Contractor shall be responsible for damage to all equipment and materials incurred during removal. All repairs or replacements due to damage or loss by the Contractor shall be made at the Contractor's expense. Bark mulch shall matching the variety currently in place around the business sign shall be used.
- 220.3 <u>Construction Method:</u> Prior to removal of the existing business signs, the Contractor shall have prepared the area for the new sign to be installed to the satisfaction of the Engineer. After approval is given by the Engineer, the Contractor shall remove the business sign as shown on the plans or as directed. As required, the Contractor shall provide a means to temporarily support the business sign in a manner satisfactory to the Engineer.

Any existing concrete sign foundation shall be removed. The relocated sign posts shall be set securely in concrete or otherwise installed as required to match the existing sign foundation, and shall be erected plumb. The sign shall be erected with the face of the sign placed perpendicular to the center line of the roadway.

Light fixtures that illuminate the business sign shall be removed and relocated such that they are centered on the relocated sign and provide adequate illumination. Additional conduit, fittings, and wiring shall be provided as required for a complete lighting installation. All work shall be in strict conformance with the National Electric Code and local building code.

Bark mulch shall be placed to the limited and depth as required to match the existing landscaped area around the sign.

- 220.4 <u>Method of Measurement:</u> This work will not be measured for payment by the number of business signs with associated lighting removed and relocated, complete and accepted.
- Basis of Payment: This work will be paid for at the contract lump sum price for "Remove and Reset Business Sign and Lighting" as specified, which price shall include removal, and installation of the business sign and associated lighting, sign foundations, restoration of landscaped area around the sign, and all work, materials, tools and equipment incidental thereto.

223.0 RECONSTRUCT STONE WALL

- 223.1 <u>Description</u>: This item shall consist of the removal and reconstruction of a portion of the existing stone wall that forms the edge of the landscaping area located along the frontage of 125 Douglas Road at the corner of New London Turnpike. This wall is to be relocated in order to provide a minimum of twelve (12) inches of separation between the face of the wall and the proposed sidewalk. This wall shall be reconstructed on a processed stone base so as to fit neatly and firmly in the location indicated on the plans or where directed, and in accordance with these specifications or as approved by the Engineer.
- 223.2 <u>Materials:</u> The materials for the processed stone base shall meet the requirements of Section M.02.01 of the Form 816 for broken or crushed stone.
- 223.3 <u>Construction Methods:</u> The area for the reconstructed wall shall be excavated as required for installation of the base material.

The portion of the stone wall to be reset shall be constructed on a processed stone base and in the location and to the dimensions shown on the plans or as ordered. The base shall be a minimum of 6-inches thick and shall be installed such that it extends a minimum of 6-inches beyond the limits of the reconstructed wall.

The masonry shall be laid to line in courses, roughly leveled up in a manner to match the existing wall construction. The bottom or foundation courses shall be composed of large, selected stones, and all courses shall be laid with bearing beds parallel to the natural bed of the material. Face joints shall have a width of not more than 1 1/2 inches (38 millimeters). In laying rubble masonry for the stone wall, care shall be taken that each stone takes a firm bearing at not less than three separate points upon the underlying course. Open joints, both front and rear, shall be chinked with spalls, fitted to take firm bearing upon their top and bottom surfaces, for the purpose of securing firm bearing throughout the length of the stone.

The wall shall be backfilled with on-site excavated material.

- 223.4 <u>Method of Measurement:</u> There will be no measurement for the work completed under this item as this work is being paid for on a lump sum basis. Excavation, backfill, and gravel base shall not be measured for payment, but rather shall be included in the contract unit price for Reconstruct Stone Wall.
- 223.5 <u>Basis of Payment</u>: This work of installing the stone masonry retaining wall will be paid for at the contract lump sum price for "Reconstruct Stone Wall", complete in place, which price shall include all materials, equipment, tools, labor and work incidental thereto.

225.0 SEGMENTAL RETAINING WALL

- 225.1 <u>Description</u>: This work shall include the furnishing and installing segmental retaining walls to the lines and grades shown on the plan or as directed by the Engineer. The work shall include the excavation, preparation of a level base, installation of the modular retaining wall, backfill with select materials, and related materials required for the construction and backfill to the lines, and grades shown on the plan or as directed by the Engineer.
- 225.2 <u>Materials:</u> Granular material for the prepared base shall conform to the requirements of Section M.02.01 of the Form 816 for broken or crushed stone.

Drainage aggregate for backfill behind the wall shall consist of 3/4" stone.

Segmental retaining wall (SRW) units shall be machine formed, Portland Cement concrete blocks specifically designed for retaining wall applications. SRW units currently approved for this project are: VERSA-LOK Mosaic Retaining Wall System or approved equal, which includes three unit types: VERSA-LOK Standard units, VERSA-LOK Cobble® units and VERSA-LOK Accent® units,. Finish of SRW units shall be split face. SRW unit faces shall be of straight geometry. Finish of SRW unit faces shall be weathered split-face: a straight faced unit that is mechanically split and tumbled to create rounded edges similar in appearance to worn stone. SRW unit heights shall be both four and six inches.

Contractor shall provide three representative samples of the SRW units for color selection by the Town.

Wall materials shall conform to the applicable ASTM testing standards and manufacturer minimum specifications for the item supplied. The concrete wall units shall have a 28-day compressive strength of 3,000 psi. The units shall be interlocked with non-corrosive pins or other system approved by the Engineer.

225.3. <u>Construction Methods:</u> The Contractor shall excavate and prepare a suitable, level foundation to allow for construction of the wall to the line and grade shown on the plans or as directed by the Engineer.

Leveling pad shall be placed as shown on the plans with a minimum thickness of six inches. The leveling pad should extend laterally at least a distance of six inches from the toe and heel of the lower most SRW unit. Granular leveling pad material shall be compacted to provide a firm, level bearing surface on which to place the first course of units. Well-graded sand can be used to smooth the top 1/4-to 1/2-inch of the leveling pad. Compaction shall be with mechanical plate compactor as required to achieve 95 percent of maximum standard Proctor density. Sub-soils not meeting acceptable standards shall be removed and replaced with suitable soils. Over-excavated areas shall be filled and properly compacted.

SRW units and cap stones shall be installed according to manufacturer's specifications. Drainage aggregate consisting of 3/4" stone shall be installed to the dimensions indicated on the plans.

225.4 <u>Measurement and Payment</u>: The quantity of retaining wall shall be the actual number of square feet of wall face and cap stone completed and accepted, within the neat lines of the structure. This work will be paid for at the contract unit price per square foot for "Segmental Retaining Wall" complete in place, which price shall include all materials, equipment, tools, labor, and work incidental thereto.

228.0 TREE PROTECTION TRENCH

228.1 <u>Description:</u> This work includes excavation of a tree protection trench adjacent to an existing or proposed sidewalk by means of a chain-driven trenching machine with additional pruning of roots using hand methods as required. This is performed adjacent to the proposed sidewalk excavation and within the drip line of an existing tree to cleanly sever roots prior to sidewalk excavation.

The services of a licensed arborist will be required to supervise the above referenced work and shall be included in the contract unit price for tree protection trench.

228.2 <u>Construction Methods:</u> Tree protection trench shall be installed in advance of the intended sidewalk construction during time periods where damage to trees will be minimized, as directed by the Engineer. The work area shall generally include the length of sidewalk within the drip line of the canopy of the tree of concern. Extreme care shall be taken by the Contractor to identify and protect underground utilities within the work area, and any conflicts shall be immediately brought to the attention of the Engineer.

Where tree protection trench is called for on the plans, the Contractor shall use a chaindriven trenching apparatus to cleanly sever tree roots adjacent to the sidewalk to the full depth of the sidewalk excavation as directed by the Engineer. Additional pruning of roots using hand methods may also be required, as directed by the Engineer or licensed arborist supervising the work.

The disturbed area shall be restored to existing grades and shall be seeded per Section 205.00 of the specifications.

228.3 Payment: Tree protection trench shall be measured for payment by the number of linear feet of tree protection trench installed and accepted. This work shall be paid for at the Contract unit price for "Tree Protection Trench", which price shall include all materials, equipment, tools, labor, and work incidental thereto.

The services of a certified arborist to supervise work under this item shall not be measured separately for payment, but rather shall be included in the contract unit price for "Tree Protection Trench".

Restoration of disturbed areas shall be measured and paid for under Section 205.00 Turf Establishment.

301.0 MAINTENANCE AND PROTECTION OF TRAFFIC

301.1 <u>Description</u>: Unless other provisions are made on the plans or in the Special Conditions, the Contractor shall keep the roadway open to traffic for the full length of the project and shall provide a sufficient number of travel lanes and pedestrian pathways to move that traffic ordinarily using the roadway. The travel lanes and pedestrian pathways shall be drained and kept reasonably smooth and in suitable condition at all times in order to provide minimum interference with traffic and consistent with proper execution of the work.

Suitable ingress and egress shall be provided at all times where required for all intersecting roads and for all abutting properties have legal access.

- 301.2 <u>Construction Methods</u>: When a scheme for maintenance of traffic that may include detours is shown on the plans or approved by the Legal Traffic Authority, this shall govern unless an alternate scheme acceptable to the Engineer is offered by the Contractor at no additional cost. If no scheme is shown on the plans or described in the Special Conditions of the Contract and the Contractor wishes to deviate from the provisions of maintaining traffic as described in this Section, the Contractor must submit, and the Engineer may approve, a schedule showing a proposed sequence of operations and a compatible method of maintaining traffic.
- Traffic Signs and Barricades: The Contractor will furnish signs, barricades, traffic cones, and traffic delineators to forewarn traffic of the construction. The Contractor will also provide such safety measures, pavement markings, warning devices, and signs as deemed necessary to safeguard and guide the traveling public through detours ordered by the Engineer or included in the approved scheme for maintenance of traffic. Signs and barricades will be delivered adjacent to the project and traffic cones and delineators will be provided when required, at no cost to the Town. The Contractor shall erect, maintain, move, adjust, relocate and store these signs, barricades, traffic cones, and delineators when, where, and in accordance with the "Manual on Uniform Traffic Control Devices", or as directed by the Engineer.

The use of unauthorized or unapproved signs, barricades, traffic cones, or traffic delineators will not be permitted.

The Contractor shall keep all signs in proper position and clean and legible at all times. Care shall be taken so that weeds, shrubbery, construction materials or equipment, and soil are not allowed to obscure any sign, light, or barricade. Signs that do not apply to existing conditions shall be removed or adjusted so that the legend is not visible to approaching traffic.

301.4 <u>Snow Removal</u>: The Contractor, when order by the Engineer, shall remove snow and take care of icy conditions on temporary, new, and existing sidewalks on any part of the right-of-way within the limits of the project.

Snow removal and correction of icy conditions other than those resulting from the Contractor's operations, and snow removal on uncompleted contracts under traffic, will remain the obligation of the Town.

301.5 <u>Failure to Provide</u>: Should the Contractor fail to perform any of the work required under this Section, the Town may perform, or arrange for others to perform, such work. In such cases, the Town will deduct from monies due or to become due the Contractor, all expenses connected therewith.

301.7 <u>Basis of Payment</u>: Maintenance and Protection of Traffic will be paid for at the Contract Lump Sum price for "Maintenance and Protection of Traffic". This price shall include all costs for labor, equipment, and services involved in the erection, maintenance, moving, adjusting, relocating and storing of signs, barricades, traffic cones, and traffic delineators furnished by the Contractor, as well as all cost of labor and equipment involved in the maintenance of traffic lanes and detours ordered or included in the approved scheme for maintenance of traffic.

NOTE: The Town of Glastonbury CHIEF OF POLICE, acting in the capacity of the LEGAL TRAFFIC AUTHORITY, shall be the sole and final authority for the Maintenance and Protection of Traffic.

302.0 TRAFFICPERSON

- 302.1 <u>General</u>: This item shall conform to Section 9.70 TRAFFICPERSON, of the Form 816.
- 302.3 <u>Description</u>: Add the following to the first paragraph of Section 9.70.01

"Trafficpersons may consist of extra duty officers of the Glastonbury Police Department or uniformed flaggers meeting acceptable criteria. The Police Chief, as the Legal Traffic Authority, shall determine which is acceptable based on location, traffic volumes, and traffic conditions."

"All work under this item shall be paid only for the duration of the Contract as contained in the Special Conditions under 'Time for Completion/Notice to Proceed' and for any time extensions granted in writing by the Town. Payment for police officers required after the duration of the Contract and approved time extensions shall be made directly by the Town and such costs deducted from future payments due the Contractor."

303.3 <u>Basis of Payment:</u> Replace Section 9.70.05 with the following:

"There will be no direct payment for safety garments or STOP/SLOW paddles. All costs associated with furnishing safety garments and STOP/SLOW paddles shall be considered included in the general cost of the item.

1. Police Officers: The sum of money shown on the bid proposal as "Estimated Cost" for this work will be considered the bid price even though payment will be made as described below. The estimated cost figure is not to be altered in any manner by the bidder. Should the bidder alter the amount shown, the altered figures will be disregarded and the original price will be used to determine the total amount for the contract.

When the trafficperson consists of Town of Glastonbury Police Officers, the Contractor shall provide the invoices from such work to the Engineer and the Town will pay these invoices directly to the Police Department. Under these circumstances, the Contractor will be reimbursed only for the 5% markup on the actual cost of police services under this line item.

2. Uniformed Flagger: Uniformed flaggers will be paid for at the contract unit price per hour for "Trafficperson (Uniformed Flagger)" as listed in the bid proposal, which price shall include all compensation, insurance benefits, and any other cost or liability incidental to the furnishing of the trafficpersons ordered."

403.0 **EARTH TRENCH EXCAVATION**

403.01 General: The Contractor shall make excavations of normal depth in earth for trenches and structures; shall backfill such excavations to the extent necessary; shall furnish the necessary material and construct embankments and fills; and shall make miscellaneous earth excavations and do miscellaneous grading. All such work shall be done as indicated on the drawings and as herein specified.

> The program of excavation, dewatering, sheeting and bracing shall be carried out in such manner as to eliminate all possibility of undermining or disturbing the foundations of existing structures or of work previously completed under this contract.

> Excavation in general shall be in open trenches. Tunneling shall be done only to pass under obstructions such as pipes or duct or only as indicated on contract drawings, or in Special Provisions, or on written permission of the Engineer, and then only in accordance with those sections hereof which describe tunnel excavation, and subject to such further conditions as may have been described by drawings, Special Provisions, or as the Engineer may specify.

> The Contractor shall make excavations in such manner and to such widths as will give suitable room for building the structures or laying and jointing the piping; shall furnish and place all sheeting, bracing, and supports; shall do all coffer damming, pumping and draining; and shall render the bottom of the excavations firm and dry and acceptable in all respects.

403.02 Trench Excavation: Where pipe is to be laid in gravel bedding or concrete cradle, the trench may be excavated by machinery to or to just below, the designated subgrade, provided that the material remaining at the bottom of the trench is no more than slightly disturbed.

> Where pipe is to be laid directly on the trench bottom, the lower part of trenches in earth shall not be excavated to subgrade by machinery, but, just before the pipe is to be placed, the last of the material to be excavated shall be removed by means of hand tools to form a flat or shaped bottom, true to grade, so that the pipe will have a uniform and continuous bearing and support on firm and undisturbed material between joints except for limited areas where the use of pipe slings may have disturbed the bottom.

- Depth of Trench: Trenches shall be excavated to such depths as will permit the pipe to be laid at the elevations, slopes or depths of cover indicated on the drawings, and at uniform slopes between indicated elevations.
- 403.04 Width of Trench: The methods and equipment used for excavation must be adapted to the conditions at the site and the dimensions of the required trench. The width of ground or street surfaces cut or disturbed shall, in general, be kept as small as practicable to accommodate the work and shall not be widened by scraping or loosening materials from the sides. Every effort shall be made to keep the sides of the trenches firm and undisturbed until backfilling has been completed and consolidated.

Width of pipe trenches shall be wide enough to provide sufficient space for shoring, for foundations, for drainage, for laying, jointing, inspecting, and backfilling of sides of pipe, or for building the required structures, and as near as feasible to the above described minimums, in order to reduce the load of backfill upon the top of the sewer; to provide lateral support for the fill and haunching on the sides of the pipe, and to insure that the pipe will not be pushed out of line while placing backfill.

The maximum permissible trench width to be paid by the Town varies with the diameter of the pipe (see table 403-1). Where the Contractor chooses not to use trench supports, the

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403.03

Contractor will still be paid as per maximum trench widths or actual trench width, whichever is the least.

403.05

<u>Excavation for Special Foundations</u>: Where concrete, stone or underdrain is required or ordered, excavation shall be carried down to the depth and lines required for such foundation or underdrain. If required by contract drawings or Special Provisions as part of the structure and included in the price, no additional payment for this additional excavation, as excavation, will be made. If the foundation is paid by the cubic yard or other specific item of proposal, such price for foundation shall include excavation therefore. Excavation for underdrain is included in price for underdrain.

Where the plans, Proposal or Special Provisions indicate certain foundations, they will be constructed and paid for as indicated.

Where the soil in subgrade is found to be soft, loose or freshly-filled earth, or unstable or unsuitable as a base for the proposed sewer or structure, the Engineer may, in his discretion, order it excavated to such depth and width as he may deem proper and replaced with gravel, crushed stone, concrete, plank or similar materials as he may direct.

If the excavation for foundation is made wider or deeper than required or ordered, or if excavation for concrete on sides of pipe is made wider than required or ordered, then no additional payment for the additional quantities of excavation or for additional foundation or side filling materials will be made, if being assumed that the added space was excavated for the convenience of, or by error of, the contractor.

403.06

Length of Trench and Space Occupied: Trenches must be constructed with a minimum of inconvenience and danger to the public and all other parties. To that end, the length of trench opened at any time, from point where ground is being broken to completed backfill and temporary surfacing, and also the amount of space in streets or public and private lands occupied by trench soil banks, equipment and supplies, shall to exceed the space or spaces considered reasonably necessary and expedient by the Engineer. In determining the length of open trench, the space for equipment, materials, supplies, etc. needed, the Engineer will consider the nature of the street or land where work is being done, depth and width of trench, types and methods of construction and equipment being used, inconvenience to the public or to private parties, possible dangers, limits or rights-of-way and other proper matters.

The Contractor must keep streets and premises near the work free from unnecessary obstructions, debris, etc. The Engineer may, at any time order all equipment, materials, surplus from excavations, debris, etc., lying outside reasonable limits of space, promptly removed; and should the Contractor fail to remove such materials within three days after notice to remove same, the Engineer may cause any part or all of such materials to be removed by such persons as he may employ, at the Contractor's expense, and may deduct the costs thereof from payment which may be or may become due to the contractor under this Contract. In any cases when public safety urgently demands it, the Engineer may cause such materials to be removed without prior notice.

Trenches shall be excavated with approximately vertical sides between the elevation of the center of the pipe and an elevation one foot above the top of the pipe.

403.07

<u>Dimensions of Trenches</u>: Trenches shall be excavated to the lines indicated on contract drawings or as described for any particular structure by any contract document. In general, room shall be allowed for installing the pipe or other structure, for making and inspecting joints in pipe, for placing and compacting fill around and on both sides of pipe, for draining and pumping as needed, for removal of unsuitable materials, and for any other purpose incidental to the fulfillment of the Contract and these specifications.

Care must be taken to excavate to correct line, grade and width at all points.

In general, sides of trenches must be not less than four inches from outside of barrel of all pipe eight inches or less in size, six inches from outside of barrel of pipe ten inches or larger in size, or as shown by contract drawings. Except as otherwise provided, excavation shall conform closely to the form and grade of the bottom of the pipe or foundation required. To accomplish this, the Engineer may require that no earth shall be excavated by machinery nearer than six inches to the finished subgrade, and the last six inches of excavation in earth shall be carefully removed by hand labor to the exact lines and grade required, immediately prior to laying pipe or underdrain or building bottom of structure.

- 403.08 Extent of Open Excavation: The extent of excavation open at any one time will be controlled by the conditions, but shall always be confined to the limits prescribed by the Engineer. At no time shall the extend of the open excavation go beyond two structures.
- 403.09 Trench Excavation in Fill: If pipe is to be laid in embankments or other recently filled material, the material shall first be placed to the top of the fill or to a height of at least one foot above the top of the pipe, whichever is the lesser. Particular care shall be taken to ensure maximum consolidation of material under the pipe location. The pipe trench shall be excavated as though in undisturbed material.
- 403.10 <u>Unauthorized Excavation</u>: If the bottom of any excavation is taken out beyond the limits indicated or prescribed, the resulting void shall be backfilled at the Contractor's expense with ³/₄" crushed stone if the excavation was for a pipeline not having a concrete cradle or encasement, or with Class B concrete if the excavation was for a masonry structure.
- 403.11 <u>Cutting of Pavement</u>: When the trench lies within a paved area, the trench shall be cut with an approved tool. All cuts shall be made to straight lines and shall be parallel and/or perpendicular to the center line of the trench.
- 403.12 <u>Bridging Trenches</u>: The Contractor shall, at no cost, provide suitable and safe bridges and other crossings where required for the accommodation of travel, and to provide access to private property during construction, and shall remove said structures thereafter.
- Obstacles: Some obstructions, obstacles, or difficulties in the path of the work anticipated, or in the performance of the work, may have been indicated by drawings, Special Provisions, or in other contract documents. The omission of any indication or mention of any obstruction, obstacle or difficulty which a reasonable and careful contractor, bidder, or estimator might have anticipated, or any question as to adequacy of such indication as given, shall not entitle the Contractor to any extra or additional compensation for any loss or expense occasioned directly or indirectly by such obstruction, etc., not to any extension of time or waiver of any requirement of the Contract and Specifications. The Contractor shall be understood to have entered into the Contract with full knowledge that in any work involving excavation, operation in public highways or adjacent to other developments, some unforeseen obstacle, difficulties, unforeseen soil or ground water conditions, etc., may be encountered, and that the Contractor has included in the bid and contract obligations the assumptions of the risks and cost to which such obstacles, etc. may subject the bid.

The Town will make arrangements for clearance or avoidance of permanent obstruction by pipes and structures of public utilities and of public bodies, except as otherwise indicated on drawings or contract documents, where such obstruction is found in the space to be occupied by the pipe or structure to be built under the Contract. The Town will not assume the cost of temporary removal, support, protection, etc. of pipes, poles, and other structures which do not occupy the space to be occupied by the pipe or structure to be built for the Town, where

removal, support, protection, etc. of such pipes, poles or structures is desired for the convenience of, or to save expense to, or to accommodate the equipment of the Contractor.

403.14 Ends of Certain Pipes to be Sealed: If any pipe, drain, culvert, connection or similar conduit is encountered and cut off or cut through incidental to the construction of the work, and if the said drain, etc. is not to continue to function or be used, the open end or ends of such pipes shall be securely and tightly closed by an adequate cover or bulkhead as directed by the Engineer. Except as a specific price for such closings was fixed in the Proposal, the cost of such covers, bulkheads, and the setting of them shall have been included in the price of prices bid for various other portions of the work in the Proposal and no additional payment will be made therefore.

In removing existing pipes or other structures, the Contractor shall use care to avoid damage to materials, and the Engineer shall include for payment only those new materials which are necessary to replace those unavoidably damaged.

The structures to which the provisions of the preceding three paragraphs shall apply include pipes, wires, and other structures which (a) are not indicated on the drawings or otherwise provided for, (b) encroach upon or are encountered near the substantially parallel to the edge of the excavation, and (c) in the opinion of the Engineer will impede progress to such an extent that satisfactory construction cannot proceed until they have been changed in location, removed (to be later restored), or replaced.

When fences interfere with the Contractor's operations, the Contractor shall remove and (unless otherwise specified) later restore them to at least as good condition as that in which they were found immediately before the work was begun, all without additional compensation. The restoration of fences shall be done as promptly as possible and not left until the end of the construction period.

403.15 <u>Excavation Near Existing Structures</u>: Attention is directed to the fact that there are pipes, drains, and other utilities in certain locations. Some of these have been indicated on the drawings, but no attempt has been made to show all of the services, and the completeness or accuracy of the information given is not guaranteed.

As the excavation approaches pipes, conduits, or other underground structures, digging by machinery shall be discontinued and the excavation shall be done by means of hand tools, as directed. Such manual excavation, when incidental to normal excavation, shall be included in the work to be done under items involving normal excavation.

Where determination of the exact location of a pipe or other underground structure is necessary for doing the work properly, the Contractor may be required to excavate test pits to determine such locations. When such test pits may be properly considered as incidental to other excavation, the Contractor shall receive no additional compensation, the work being understood to be included as a part of the excavation. When the Engineer orders test pits beyond the limits of excavation considered as part of the work, such test pits shall be paid for as specified under MEASUREMENT AND PAYMENT.

403.16 Protection of Existing Structures: All existing pipes, poles, wires, fences, curbing, property-line markers, and other structures which the Engineer decides must be preserved in place without being temporarily or permanently relocated shall be carefully supported and protected from injury by the Contractor. Should such items be injured, they shall be restored by the Contractor, without compensation therefore, to at least as good condition as that in which they were found immediately before the work was begun.

- 403.17 Relocation and Replacement of Existing Structures: Whenever the Contractor encounters certain existing structures as described below and is so ordered in writing, the Contractor shall do the whole or such portions of the work as he may be directed, to change the location of, remove and later restore, replace such structures, or to assist the owner thereof in so doing. For all such work, the Contractor shall be paid under such items of work as may be applicable, otherwise as Extra Work.
- 403.18 Payment: Unless specified otherwise, payment for earth excavation and the disposal of surplus excavated material shall be included in the unit price or lump sum price of the item associated therewith.

TABLE 403-1

TRENCH WIDTHS

Maximum pay limits for trench widths are as follows:

Where the Contractor chooses not to use trench supports the Contractor will still be paid as per maximum trench widths.

Size Pipe Nominal Inside Diamete	er	Maximum Width of Trench
6"		2.5 Feet
8"		4.0 Feet
10"		4.0 Feet
12"		4.0 Feet
15"		4.0 Feet
18"		4.0 Feet
21"		4.3 Feet
24"		4.5 Feet
27"		4.8 Feet
30"		5.1 Feet
33"		5.4 Feet
36"		5.7 Feet
39"		5.9 Feet
42"		6.3 Feet

404.0 TRENCH DEWATERING

404.01

<u>General</u>: To ensure proper conditions at all time during construction, the Contractor shall provide and maintain ample means and devices (including spare units kept ready for immediate use in case of breakdown) with which to intercept and/or remove promptly and dispose properly of all water entering trenches and other excavations. Such excavations shall be kept dry until the structures, pipes, and appurtenances to be built therein have been completed to such extent that they will not be floated or otherwise damaged.

All water pumped or drained from the work shall be disposed of in a suitable manner without undue interference with other work, damage to pavements, other surfaces, or property. Suitable temporary pipes, flumes, or channels shall be provided for water that may flow along or across the site of the work.

404.02

<u>Temporary Underdrains</u>: Temporary Underdrains, if used, shall be laid in trenches beneath the grade of the structure. Trenches shall be of suitable dimensions to provide room for the chosen size of underdrain and its surrounding gravel. Underdrain pipe shall be acceptable PVC or ADS pipe of standard thickness. Sewer pipe of the quality known as "seconds" will be acceptable.

Underdrains, if used, shall be laid at an approved distance below the bottom of the normal excavation wrapped in Mirafi 140 or equal as outlined in Section 409.05 of these specifications, and entirely surrounded by graded gravel or crushed stone to prevent the admission of sand or other soil into the underdrains. The distance between the top of the bell of the underdrain pipe shall be at least three (3) inches unless otherwise permitted. The space between the underdrain and the pipe or structure shall be filled and crushed stone which shall be rammed, if necessary, and left with a surface suitable for laying the pipe or building the structure.

404.03

<u>Drainage Wellpoint System</u>: If required, the Contractor shall dewater the excavations by means of an efficient drainage system which will drain the soil and prevent saturated soil from flowing into the excavation. The wellpoints shall be designed especially for this type of service. The pumping unit shall be designed for use with the wellpoints and shall be capable of maintaining a high vacuum and of handling large volumes of air and water at the same time.

If required, the installation of the wellpoints and pump shall be done under the supervision of a competent representative of the manufacturer. The Contractor shall do all special work such as surrounding the wellpoints with sand or gravel or other work which is necessary for the wellpoint system to operate for the successful dewatering of the excavations.

404.04

<u>Payment</u>: Unless otherwise specified, payment for trench dewatering shall be included in the unit price of the item associated therewith.

405.0 BACKFILLING AND CONSOLIDATION

405.1 <u>General:</u> In general, and unless other material is indicated on the drawings or specified, material used for backfilling trenches and excavations around structures shall be suitable material which was removed in the course of making the construction excavations.

Frozen materials shall not be placed in the backfill nor shall backfill be placed upon frozen material. Previously frozen material shall be removed, or shall be otherwise treated a required before new backfill is placed.

- Backfilling around Structures: The Contractor shall not place backfill against or on structures until they have attained sufficient strength to support the loads (including construction loads) to which they will be subjected without distortion, cracking, or other damage. As soon as practical after the structures are structurally adequate and other necessary work has been done, special leakage tests, if required, shall be made. Promptly after the completion of such tests, the backfilling shall be started and then shall proceed until its completion. The best of the excavated materials shall be used in backfilling within two feet of the structure. Unequal soil pressures shall be avoided by depositing the material evenly around the structure.
- 405.3 <u>Backfilling Pipe Trenches:</u> As soon as practicable after the pipes have been laid and the joints have acquired a suitable degree of hardness, if applicable, or the structures have been built and are structurally adequate to support the loads, including construction loads to which they will be subjected, the backfilling shall be started, and thereafter it shall proceed until its completion in accordance with pipe manufacturer recommendations.

With the exception mentioned below in this paragraph, trenches shall not be backfilled at pipe joints until after that section of the pipeline has successfully passed any specified tests required. Should the contractor wish to minimize the maintenance of lights and barricades and the obstruction of traffic, the contractor may, at his own risk, backfill the entire trench, omitting or including backfill at joints as soon as practicable after the joints have acquired a suitable degree of hardness, if applicable, and the related structures have acquired a suitable degree of strength. The contractor shall, however, be responsible for removing and later replacing such backfill at no cost should the contractor be ordered to do so in order to locate and repair or replace leaking or defective joints or pipe.

- <u>a. Materials:</u> The nature of the materials will govern both their acceptability for backfill and the methods best suited for their placement and compaction in the backfill. The materials and methods shall both be subject to the approval and direction of the Engineer. No stone or rock fragment larger than 12 inches in greatest dimension shall be placed in the backfill nor shall large masses of backfill material be dropped into the trench in such a manner as to endanger the pipeline. If necessary, a timber grillage shall be used to break the fall of material dropped from a height of more than five feet. Pieces of bituminous pavement shall be excluded from the backfill unless their use is expressly permitted, in which case they shall be broken up as directed.
- <u>b. Ho Pac Trench Consolidation:</u> Where the trench backfill is consolidated by the "Ho Pac" method and the depth of the trench from the road or ground surface to the top of the pipe exceeds ten feet, the trench backfill shall be placed and consolidated in two lifts of equal depth.

The approved backfill material shall be placed and compacted at a moisture content between four and eight percent (based on dry density, by weight), or with two percent of the optimum moisture content as determined by the moisture density relationship test specified in ASTM D

1557, at the option of the Engineer. Compaction shall be by a "Ho Pac" vibratory compactor or approved equal, operating at a frequency between ten and 40 Hertz, placed directly on the backfill surface, and applied with the maximum practical force applicable by the backhoe to which it is attached. Compaction effort shall be continued until no further visible settlement occurs.

c. Miscellaneous Requirements: Whatever method of compacting backfill is used, care shall be taken that stones and lumps shall not become nested and that all voids between stones shall be completely filled with fine material. Only approved quantities of stone and rock fragments shall be used in the backfill. The Contractor shall, as part of the work done under the items involving earth excavation and rock excavation as appropriate, furnish and place all other necessary backfill material.

All voids left by the removal of sheeting shall be completely backfilled with suitable materials, thoroughly compacted.

Where required, excavated material which is acceptable to the Engineer for surfacing or pavement sub base shall be placed at the top of the backfill to such depths as may be specified elsewhere or as directed. The surface shall be brought to the required grade and stones raked out and removed.

Embankments Over Pipe: Where the top of the pipe is less than three feet below the surface of the ground, additional fill shall be placed to form an embankment to cover and protect the pipe. The top of such embankment shall not be less than three feet above the top of the pipe and not less than one foot wider than the outside diameter of the pipe, with side slopes no steeper than one and one half horizontal to vertical, or of such section as may have been indicated by drawings. Such embankments shall be made of suitable dry earth, well compacted. Embankments must be maintained to the full required dimensions during the maintenance period of the Contract, and any settlement, washout, or deficiency occurring or found during that time shall be rectified and embankments brought up to the required height, width and slopes.

In general, such embankments may be made with materials excavated on the job and not used for backfill elsewhere. Should there not be sufficient surplus material for embankments, or should it be unsuitable or inconveniently located, the Contractor shall secure and provide sufficient suitable material. In any case, where the Town has provided borrow pits from which the Contractor may obtain filling material, the Contractor must conform to the conditions for excavating and moving such material as established by acts of the Town in obtaining such rights, and by indications on drawings or in other contract documents.

Openings through embankments for the passage of water and other purposes will be provided as indicated on drawings or elsewhere, or as ordered.

Grass shall be seeded or turf placed on embankments if, where, and as provided in contract documents. In general, if grassing is not required, the Contractor may, at his option, grass embankments to facilitate his maintenance. The Engineer may order grassing where not otherwise required under the general provisions for additional work if he deems proper.

Care shall be taken that sewer and appurtenances are not damaged by equipment or methods used for making and maintaining embankments.

Except as specific provisions may have been made in the Proposal for a particular contract, no payment other than prices bid for pipe will be paid for building and maintaining embankments or securing material therefore.

If, however, a price per cubic yard was established by the Proposal for filling material placed in embankments and/or in fills at side of embankment to avoid the formation of depressions there, the quantity of such filling material will be estimated and paid as the actual quantity placed, up to, but not exceeding the lines or sections required, measured after the embankment or fill has been made.

405.5 <u>Material for Filling and Embankments:</u> Approved selected materials available from the excavations and not required for backfill around pipes or against structures may be used for filling and building embankments, except as otherwise specified. Material needed in addition to that available from construction operations shall be obtained from approved gravel banks or other approved deposits. The Contractor shall furnish, at no cost, all borrowed material needed on the work.

All material, whether from the excavations of from borrow, shall be of such nature that after it has been placed and properly compacted it will make a dense, stable fill. It shall not contain vegetation, masses of roots, individual roots more than 18 inches long or more than one half inch in diameter, stones over six inches in diameter, or porous matter. Organic matter shall not exceed minor quantities and shall be well distributed.

- 405.6 Preparation of Subgrade: The Contractor shall remove loam and topsoil, loose vegetable matter, stumps, large roots, etc. from areas upon which embankments will be built or material will be placed for grading. The subgrade shall be shaped as indicated on the drawings and shall be so prepared by forking, furrowing, or plowing so that the first layer of the new material placed thereon will be well bonded to it.
- 405.7 <u>Placing and Compacting Material:</u> After the subgrade has been prepared as hereinbefore specified, the material shall be placed thereon and built up in successive layers until it has reached the required elevation.

Layers shall not exceed 12 inches in thickness before compaction. In embankments at structures, the layers shall have a slight downward slope away from the structure. In other embankments, the layers shall be slightly dished toward the center. In general, the finer and less pervious materials shall be placed against the structures or in the center, and the coarser and more pervious materials, upon the outer parts of embankments.

Each layer of material shall be compacted by the use of approved rollers or other approved means so as to secure a dense, stable and thoroughly compacted mass. At such points as cannot be reached by mobile mechanical equipment, the materials shall be thoroughly compacted by the use of suitable power driven tampers.

Previously placed or new materials shall be moistened by sprinkling, if required, to ensure proper bond and compaction. No compacting shall be done when the material is too wet, from either rain or too great an application of water, to compact it properly. At such times, the work shall be suspended until the previously placed and new materials have dried out sufficiently to permit proper compaction.

- 405.8 <u>Compaction Test:</u> When, in the opinion of the Engineer, such tests are necessary, the Contractor shall have compaction density tests taken by an approved independent laboratory. Ninety five percent of the maximum density determined in accordance with AA SHOT 180 Method D shall be achieved.
- 405.9 <u>Payment:</u> Unless otherwise specified, payment for backfilling and consolidation shall be included in the unit price or lump sum price of the item associated therewith.

406.0 PIPES AND CULVERTS

406.1 <u>General:</u> These items shall conform to Section 6.51 CULVERTS of the Form 816, modified as follows.

Trench excavation, dewatering, and backfill for these items shall be according to Section 403.0 EARTH TRENCH EXCAVATION, Section 404.0 TRENCH DEWATERING, and Section 405.0 BACKFILLING AND CONSOLIDATION of these specifications.

- 406.2 <u>Method of Measurement:</u> There will be no direct measurement for trench excavation and backfill, and there will be no measurement for payment for gravel fill, bedding material, or for the cost of modifying the existing catch basin as required for connection of the proposed pipe to the existing drainage system, but the costs thereof shall be included in the contract unit price per linear foot for the size and type of pipe being installed.
- Basis for Payment: The work under these items will be paid for at the contract unit price as listed in the bid proposal per linear foot of pipe and size specified, complete in place including trench excavation, backfill, gravel fill, bedding material and all other materials, equipment, tools, and labor incidental thereto.

407.0 CATCH BASINS AND DROP INLETS

407.1 <u>General:</u> These items shall conform to Section 5.07 CATCH BASINS, MANHOLES, AND DROP INLETS of the Form 816, modified as follows.

Trench excavation, dewatering, and backfill for these items shall be according to Section 403.0 EARTH TRENCH EXCAVATION, Section 404.0 TRENCH DEWATERING, and Section 405.0 BACKFILLING AND CONSOLIDATION of these specifications.

- 407.2 <u>Method of Measurement:</u> There will be no direct measurement for trench excavation in the installation of the various drainage appurtenances.
- 407.3 <u>Basis of Payment:</u> The work under these items shall be paid for at the unit contract price as listed in the bid proposal per each for the type of catch basins and drop inlets, including new construction, resets, or conversions, complete in place and shall include all materials, tools, equipment, and labor necessary to complete the excavation and installation of units in conformity with the plans, or as specified.

509.0 RESET MANHOLE

- General: Under this item shall be included the alteration or reconstruction of existing manholes in conformity with the lines, grades, dimensions, and details shown on the plans, or as ordered, and in accordance with the provisions of these specifications for the various materials and work which constitute the completed structure.
- 509.2 <u>Construction Methods:</u> Frames, covers and tops which are to be reset shall be removed from their present beds, the walls or sides shall be rebuilt to conform to the requirements of the new construction and the tops, frames and covers reset, or the grates or covers may be raised by extensions of suitable height approved by the Engineer.

Resetting tops, frames and covers will be measured as units. When resetting tops, frames and covers, there will be no measurement for excavation; cutting, removal and replacement of pavement; pervious material and backfill.

Payment: Reset Units will be paid for at the contract unit price each for "Reset Manhole," of the type specified, respectively, complete in place, which price shall include excavation, pervious material, backfill, cutting of pavement, removal and replacement of pavement structure, extensions, concrete masonry units, mortar, and all materials, equipment, tools and labor incidental thereto.

NEW LONDON TURNPIKE SIDEWALK EXTENSION BID PROPOSAL

BID #GL-2010-23

Proposal of	
(hereinafter called "Bidder"), organized and existing under the laws of the State of	
, doing business as	
To the Town of Glastonbury (hereinafter called "Town").	
In compliance with your Invitation to Bid, the Bidder hereby proposed to furnish materials	and/or
services as per Bid Number GL-2010-23 in strict accordance with the Bid Documents, within the time se	et forth
therein, and at the prices stated below.	
By submission of this bid, the Bidder certifies, and in the case of a joint bid each party thereto c	ertifies
as to their own organization that this bid has been arrived at independently without consu	Itation,
communication, or agreement as to any matter relating to this bid with any other Bidder or wi	th any
competitor.	
The Bidder acknowledges receipt of the following:	
Addendum #1	
Addendum #2	
Addendum #3	

It is the responsibility of the Bidder to check the Town's website for any Addendum before submitting the bid.

NEW LONDON TURNPIKE SIDEWALK EXTENSION BID PROPOSAL

ITEM <u>NO</u> .	DESCRIPTION	QTY.	<u>UNIT PRICE</u>	EXTENSION
1.	Preparation of Site in accordance with Section 002.0 of the Detailed Construction Specifications	Lump Sum	\$/L.S.	\$
2.	Permanent Pavement Patch in Accordance with Section 105.0 of the Detailed Construction Specifications	45 SY	\$/S.Y.	\$
3.	Bituminous Concrete Lip Curbing in Accordance with Section 113.0 of the Detailed Construction Specifications	220 LF	\$/L.F.	\$
4.	4' Wide Concrete Sidewalk, 5" thick in accordance with Section 201.0 of the Detailed Construction Specifications	6,080 SF	\$/S.F.	\$
5.	4' Wide Concrete Sidewalk, 8" thick Reinforced in accordance with Section 201 of the Detailed Construction Specifications	.0 300 SF	\$/S.F.	\$
6.	Pedestrian Ramps in accordance with Section 201.0 of the Detailed Construction Specifications	10 EA	\$/EA.	\$
7.	Grading and Topsoil in accordance with Section 204.0 of the Detailed Construction Specifications	1,500 SY	\$/S.Y.	\$
8.	Turf Establishment in accordance with Section 205.0 of the Detailed Construction Specifications	1,500 SY	\$/S.Y.	\$
9.	Sedimentation Control Fence in Accordance with Section 206.0 of the Detailed Construction Specifications	100 LF	\$/L.F.	\$
9.	Sedimentation Control Sack in Accordance with Section 207.0 of the Detailed Construction Specifications	4 EA	\$/EA.	\$
10.	Removal of Pavement in accordance with Section 213.0 of the Detailed Construction Specifications	180 SY	\$/S.Y.	\$
11.	Permanent Driveway Repairs in accordance with Section 215.0 of the Detailed Construction Specifications	100 SY	\$/S.Y.	\$
12.	Remove and Reset Business Sign and Lighting in accordance with Section 220.0 of the Detailed Construction Specifications	Lump Sur	m \$/L.S.	\$

NEW LONDON TURNPIKE SIDEWALK EXTENSION BID PROPOSAL

ITEM NO.	DESCRIPTION	QTY.	UNIT PRICE	EXTENSION
13.	Reconstruct Stone Wall in accordance with Section 223.0 of the Detailed Construction Specifications	Lump Sun	n \$/L.S.	\$
14.	Segmental Retaining Wall in accordance with Section 225.0 of the Detailed Construction Specifications	580 SF	\$/S.F.	\$
15.	Tree Protection Trench in accordance with Section 228.0 of the Detailed Construction Specifications	120 LF	\$/L.F.	\$
16.	Maintenance and Protection of Traffic in accordance with Section 301.0 of the Detailed Construction Specifications	Lump Sum	\$/L.S.	\$
17.	Trafficperson (Police Officer) in accordance with Section 302.0 of the Detailed Construction Specifications	EST	\$ <u>3,000.00</u> /EST	\$3,000.00
18.	Trafficperson (Uniformed Flagger) in accordance with Section 302.0 of the Detailed Construction Specifications	48 HR	\$/HR	\$
19.	15-inch HDPE Pipe in accordance with Section 406.0 of the Detailed Construction Specifications	21 LF	\$/LF	\$
20.	12-inch RCP Pipe in accordance with Section 406.0 of the Detailed Construction Specifications	60 LF	\$/LF	\$
21.	Type 'C' Catch Basin in accordance with Section 407.0 of the Detailed Construction Specifications	2 EA	\$/EA	\$
22.	Reset Catch Basin Top in accordance with Section 407.0 of the Detailed Construction Specifications	1 EA	\$/EA.	\$
23.	Convert Catch Basin to Manhole in accordance with Section 407.0 of the Detailed Construction Specifications	1 EA	\$/EA.	\$
24.	Reset Manhole Top in accordance with Section 509.0 of the Detailed Construction Specifications	1 EA	\$/EA.	\$

BID #GL-2010-23

TOTAL BID AMOUNT:		\$	
WRITTEN BID AMOUNT:			
-			
TOWN OF GLASTONBURY BID / PROPOSAL DATE ADVERTISED	September 30, 2009	GL#or RPGL# DATE/TIME DUE	2010-23 October 13, 2009 at 11:30 a.m.
NAME OF PROJECT	New London Turnpik	e Sidewalk Extension	
It is the responsibility of the Bidd and Time of Bid Opening, and it WEBSITE BEFORE SUBMITTIN	t also THE RESPONSIB	ILITY OF THE BIDDER 1	TO CHECK THE TOWN'S
CODE OF ETHICS:			
I/We have reviewed a copy of Consultant Acknowledgement			and agree to submit a _*
*Bidder is advised that effective proposal where the Bidder has			nnot consider any bid or
Respectfully submitted:			
Type or Print Name of Individu	al i	Doing Business as (Trad	e Name)
Signature of Individual		Street Address	
Title		City, State, Zip Code	
Date		Telephone Number/Fax N	 Number
E-Mail Address	 -	SS# or TIN#	
(Seal – If bid is by a Corporation)			
Attest			

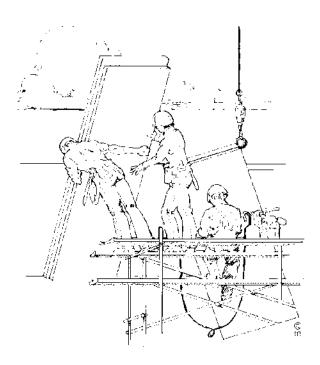
~NOTICE~

TO ALL CONTRACTING AGENCIES

Please be advised that Connecticut General Statutes Section 31-53, requires the contracting agency to certify to the Department of Labor, the total dollar amount of work to be done in connection with such public works project, regardless of whether such project consists of one or more contracts.

Please find the attached "Contracting Agency Certification Form" to be completed and returned to the Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit.

[∞] Inquiries can be directed to (860)263-6543.



CONNECTICUT DEPARTMENT OF LABOR WAGE AND WORKPLACE STANDARDS DIVISION CONTRACT COMPLIANCE UNIT

CONTRACTING AGENCY CERTIFICATION FORM

I,	, acting in my off	icial capacity as
authorized representative	e	title
for	, located a	t
contracting agenc	у	address
do hereby certify that the t	otal dollar amount of wo	ork to be done in connection with
	, locate	ed at
project name and r		address
shall be \$, which includes all w	work, regardless of whether such project
consists of one or more co	ntracts.	
	CONTRACTOR IN	NFORMATION
Nama		
IName.		
Address:		
Authorized Representative	e:	
Approximate Starting Date	ð:	<u> </u>
Approximate Completion	Date:	
ripproximate completion		_
Signature		Date
Wage & W Contract Co 200 Folly B	t Department of Labor orkplace Standards Divisompliance Unit Brook Blvd. Id, CT 06109	sion
Date Issued:		

CONNECTICUT DEPARTMENT OF LABOR WAGE AND WORKPLACE STANDARDS DIVISION

CONTRACTORS WAGE CERTIFICATION FORM

I,	0	f	
Officer, Owner, Aut	horized Rep.	Company Name	
1.1.1.20.4.4			
do hereby certify that the		Company Name	
<u>-</u>		Company I tunio	
		Street	
-		City	
and all of its subcontracto	rs will pay all worke	rs on the	
	Project Name and N	lumber	· <u>·</u> ·
	Street and City		
the wages as listed in the sis attached hereto).	schedule of prevailin	g rates required for such projec	et (a copy of which
	-	Signed	
Subscribed and sworn to b	pefore me this	day of	
	_	Notary Public	
Wage & W 200 Folly	ut Department of Lab Forkplace Standards Brook Blvd. Eld, CT 06109		
Rate Schedule Issued (L	Oate):		

[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

In accordance with Con Certified Payrolls with a shall be submitted month	statem	ent of cor	npliance		PAYRO	OLL CE	CRTIFIC	CATIO		PUBLIC	C WORKS PI	ROJECTS	_			Wage and 200 Fe			ion
CONTRACTOR NAME A	AND AI	DDRESS:									SUBCONTRAC	ΓOR NAME &	ADDRESS		WORKER'S POLICY #			SURANCE CARRIEF	2
PAYROLL NUMBER	Week-I Da	_	PROJECT NAME & A	ADDRESS											EFFECTIVE EXPIRATION				
PERSON/WORKER,	APPR	MALE/	WORK		DA	Y AND DA				Total ST	BASE HOURLY	TYPE OF	GROSS PAY	T	OTAL DEDU	CTIONS		GROSS PAY FOR	
•U	RATE %	FEMALE AND RACE*	CLASSIFICATION Trade License Type & Number - OSHA 10 Certification Number	S	T HOURS W		TH ACH DAY	F	S	Hours Total O/T Hours	RATE TOTAL FRINGE BENEFIT PLAN CASH	FRINGE BENEFITS Per Hour 1 through 6 (see back)	FOR ALL WORK PERFORMED THIS WEEK	FICA	FEDERAL WITH- HOLDING	WITH-	LIST OTHER	THIS PREVAILING RATE JOB	CHECK # AND NET PAY
											\$ Base Rate \$ Cash Fringe \$ Base Rate \$ Cash Fringe \$ Base Rate	1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$ 1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$ 1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$ 1. \$ 2. \$ 3. \$ 3. \$ 4. \$ 5. \$ 6. \$ 1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$ 1. \$ 5. \$ 6. \$ 1. \$ 7. \$ 7. \$ 7. \$ 7. \$ 7. \$ 7. \$ 7. \$ 7							
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7/13/2009 WWS-CP1		*IF REQU	JIRED								Cash Fringe *SEE REVERSE	6. \$					P	AGE NUMBER	OF

*FRINGE BENEFITS EXPLANATION (P):

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

Please specify the type of benefits pro		***
1) Medical or hospital care		
2) Pension or retirement		tion, holiday
3) Life Insurance	6) Other	(please specify)
CERTIFII	ED STATEMENT OF	COMPLIANCE
For the week ending date of		J.
I,	of	, (hereafter known as
Employer) in my capacity as		(title) do hereby certify and state:
the week in accordance with Connect hereby certify and state the following a) The records submitted are b) The rate of wages paid to contributions paid or payable defined in Connecticut Gene of wages and the amount of pemployee to any employee w subsection Connecticut Gene less than those which may als c) The Employer has complisection 31-53 (and Section 33) d) Each such employee of the policy for the duration of his contracting agency; e) The Employer does not recipiff, gratuity, thing of value, indirectly, to any prime contremployee for the purpose of it connection with a prime contractor relating to a prim	each mechanic, laborer on behalf of each such eral Statutes, section 31 payment or contributions relfare fund, as determinant Statutes, section 31-so be required by contrated with all of the provisual 1-54 if applicable for state Employer is covered by employment which provisual endowed with all of the provisual endowed en	or workman and the amount of payment or employee to any employee welfare fund, as -53 (h), are not less than the prevailing rate is paid or payable on behalf of each such need by the Labor Commissioner pursuant to 53 (d), and said wages and benefits are not need; sions in Connecticut General Statutes, atte highway construction); by a worker's compensation insurance of of coverage has been provided to the means any money, fee, commission, credit, kind which is provided directly or employee, subcontractor, or subcontractor rewarding favorable treatment in ith a prime contractor in connection with a
		oll which he knows to be false is a class D we thousand dollars, imprisoned for up to
± •	he certified payroll re-	truction safety course, program or quired to be submitted to the contracting first appears.
(Signature)	(Title)	Submitted on (Date)
	ract requirements for need work on this proje	reporting purposes only, all employees ct are not covered under the prevailing tes Section 31-53.
(Signature)	(Title)	Submitted on (Date)

Note: CTDOL will assume all hours worked were performed under Section A unless clearly delineated as Section B WWS-CP1 as such. Should an employee perform work under both Section A and Section B, the hours worked and wages paid must be segregated for reporting purposes.

Weekly	y Payro	ll Certific	ation For
Public	Works	Projects	(Continued)

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

Week-Ending Date:

Contractor or Subcontractor Business Name:

WEEKLY PAYROLL

PERSON/WORKER,	APPR	MALE/	WORK			DAY	AND I	OATE			Total ST	BASE HOURLY	TYPE OF	GROSS PAY		EDUCTIONS	S	GROSS PAY FOR	
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	%	AND											BENEFITS					RATE JOB	NET PAY
		RACE*	Trade License Type								t	TOTAL FRINGE	Per Hour	THIS WEEK	 ****	*******	0.001100		
			& Number - OSHA		ШО	URS WO	DVEDI	ACILDA	37			BENEFIT PLAN CASH	1 through 6			WITH- HOLDING	OTHER		
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												Cash Fringe	6. \$						
		AID DECL	IDED																

*IF REQUIRED

7/13/2009 WWS-CP2

NOTICE: THIS PAGE MUST BE ACCOMPANIED BY A COVER PAGE (FORM # WWS-CP1)

PAGE NUMBER ____OF

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

In accordance with Connecticut General Statutes, 31-53

Certified Payrolls with a statement of compliance

Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blyd

shall be submitted mont			•								WEEK	LY PAY	ROLL					200 F	olly Brook rsfield, C		on.
CONTRACTOR NAME Landon Corporation, 15 (SUBCONTRAC R. Cr	TOR NAME &	ADDRESS			Aetna #BAC8888		SURANCE CARRIER	
PAYROLL NUMBER 1	L NUMBER Week-Ending Date 10/25/2005 PROJECT NAME & ADDRESS State Office Building Renovation, 165 Capitol Avenue Hartford, CT 06106											2 Main Street Yantic, CT 06389 EFFECTIVE DATE: 1/1/1997 EXPIRATION DATE: xxxxxxxxx									
PERSON/WORKER AND ADDRESS	RATE %	MALE/ FEMALE AND RACE*	WORK CLASSIFICATION TRADE LICENSES TYPE & NUMBER	S 23		Т		TH 9	20 DAY	21	S 2	<u> </u>	BASE HOURLY RATE TOTAL FRINGE BENEFIT PLAN CASH	TYPE OF FRINGE BENEFITS Per Hour 1 through 6 (see back)	GROSS PAY FOR ALL WORK PERFORMED THIS WEEK	FICA	DTAL DEDUC FEDERAL WITH- HOLDING		OTHER	GROSS PAY FOR THIS PREVAILING RATE JOB	CHECK # AND NET PAY
Robert Craft 81 Maple Street Manchester, CT 06040		M/C	Electrician E-1 #0000000			8		8	8	8	3	8	\$30.75 Base Rate \$8.82 Cash Fringe	1. \$5.80 2. \$ 3. \$2.01 4. \$ 5. \$ 6. \$	\$1,582.80					\$1,582.80	\$1,582.80 #101
Ronald Jones 212 Elm Street Norwich, CT 06380	65%	M/B	Apprentice Electrician		8	8		8	8	8	3	40		1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$	\$1,464.48	\$xx.xx	\$xx.xx	\$xx.xx	\$xx.xx	\$1,464.48	\$xxx.xx #102
Robert Larson 50 South Street Norwich, CT 06380		M/H	Electrician E-2 #0000000					8	8	8	3	24		1. \$2.69 2. \$9.36 3. \$2.01 4. \$ 5. \$2.57 6. \$	\$1,026.00	\$xx.xx	\$xx.xx	\$xx.xx	\$xx.xx	\$738.00	\$xxx.xx #103
Den Smith 1000 Lindsay Avenue Rogers, CT 06238		M/C	Electrician E-2 #0000000		8	8 8		8	8	8	3	40 8 8	\$30.75 Base Rate \$11.93 Cash Fringe	1. \$2.69 2. \$ 3. \$2.01 4. \$ 5. \$ 6. \$	\$2,171.64	\$xx.xx	\$xx.xx	\$xx.xx	\$xx.xx	\$2,171.64	\$xxx.xx #104
9/1/2005 WWS-CP1		*IF REQ	UIRED										*SEE REVERSE	E SIDE				-	P	AGE NUMBER	1_OF1_

*Fringe Benefits Explanation (P):
Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.)
Please specify the type of benefits provided: 1) Medical or hospital carex 2) Pension or retirementx 3) Life Insurancex 4) Disability 5) Vacation, holidayx 6) Other (please specify)
CERTIFIED STATEMENT OF COMPLIANCE
For the week ending date of 10/25/05 I, Robert Craft of R,. Craft Electric, (hereafter known as Employer) in my capacity as President (title) do hereby certify and state:
All persons employed on said project have been paid the full weekly wages earned by them during the week ir accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:
A) The records submitted are true and accurate;
B) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such employee to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such employee to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and said wages and benefits are not less than those which may also be required by contract;
C) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and
Section 31-54 if applicable for state highway construction);
D) Each such employee of the Employer is covered by a worker's compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;
E) The Employer does not receive kickbacks, which means an money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontractor relating to a prime contract; and
F) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which
the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.
Submitted on 10/25/05 Date Signature
President
THIS IS A PUBLIC DOCUMENT, DO NOT INCLUDE SOCIAL SECURITY NUMBERS

Sec. 31-55a Page 1 of 1

Statute 31-55a

You are here: DOL Web Site ▶ Wage and Workplace Standards ▶ Statute 31-55a

- Special Notice -

To All State and Political Subdivisions, Their Agents, and Contractors

Connecticut General Statute 31-55a - Annual adjustments to wage rates by contractors doing state work.

Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section 31-54 of the general statutes, or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section 31-53 of the general statutes shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.

- The prevailing wage rates applicable to any contract or subcontract awarded on or after October 1, 2002 are subject to annual adjustments each July 1st for the duration of any project which was originally advertised for bids on or after October 1, 2002.
- Each contractor affected by the above requirement shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.
- It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly
 from the Department of Labor's Web Site. The annual adjustments will be posted on the Department of
 Labor Web page: www.ctdol.state.ct.us. For those without internet access, please contact the division
 listed below.
- The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project. All subsequent annual adjustments will be posted on our Web Site for contractor access.

Any questions should be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at (860)263-6790.

←-- Workplace Laws

Published by the Connecticut Department of Labor, Project Management Office

Last Updated: July 13, 2009

Notice

To All Mason Contractors and Interested Parties Regarding Construction Pursuant to Section 31-53 of the Connecticut General Statutes (Prevailing Wage)

The Connecticut Labor Department Wage and Workplace Standards Division is empowered to enforce the prevailing wage rates on projects covered by the above referenced statute.

Over the past few years the Division has withheld enforcement of the rate in effect for workers who operate a forklift on a prevailing wage rate project due to a potential jurisdictional dispute.

The rate listed in the schedules and in our Occupational Bulletin (see enclosed) has been as follows:

Forklift Operator:

- Laborers (Group 4) Mason Tenders operates forklift solely to assist a mason to a maximum height of nine feet only.
- Power Equipment Operator (Group 9) operates forklift to assist any trade and to assist a mason to a height over nine feet.

The U.S. Labor Department conducted a survey of rates in Connecticut but it has not been published and the rate in effect remains as outlined in the above Occupational Bulletin.

Since this is a classification matter and not one of jurisdiction, effective January 1, 2007 the Connecticut Labor Department will enforce the rate on each schedule in accordance with our statutory authority.

Your cooperation in filing appropriate and accurate certified payrolls is appreciated.

Informational Bulletin

THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE

(applicable to public building contracts entered into *on or after July 1, 2007*, where the total cost of all work to be performed is at least \$100,000)

- (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 building construction contracts (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;
- (3) 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 http://www.osha.gov/fso/ote/training/edcenters/fact_sheet.html;
- (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 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 noncompliance;
- (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.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm; or by telephone at (860)263-6790.

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

Information Bulletin Occupational Classifications

The Connecticut Department of Labor has the responsibility to properly determine "job classification" on prevailing wage projects covered under C.G.S. Section 31-53.

Note: This information is intended to provide a sample of some occupational classifications for guidance purposes only. It is not an all-inclusive list of each occupation's duties. This list is being provided only to highlight some areas where a contractor may be unclear regarding the proper classification.

Below are additional clarifications of specific job duties performed for certain classifications:

Asbestos Insulator

Handle, install, apply, fabricate, distribute, prepare, alter, repair, or dismantle
heat and frost insulation, including penetration and fire stopping work on all
penetration fire stop systems.

Carpenter

- Assembly and installation of modular fumiture/fumiture systems.
 [New] a. Free-standing furniture is not covered. This includes: student chairs, study top desks, book box desks, computer furniture, dictionary stand, atlas stand, wood shelving, two-position information access station, file cabinets, storage cabinets, tables, etc.
- Applies fire stopping materials on fire resistive joint systems only.
- Installation of insulated material of all types whether blown, nailed or attached in other ways to walls, ceilings and floors of buildings.
- Installation of curtain/window walls only where attached to wood or metal studs.

Cleaning Laborer

 The clean up of any construction debris and the general cleaning, including sweeping, wash down, mopping, wiping of the construction facility, washing, polishing, dusting, etc., prior to the issuance of a certificate of occupancy falls under the Labor classification.

Delivery Personnel (Revised)

- If delivery of supplies/building materials is to one common point and stockpiled there, prevailing wages are not required. If the delivery personnel are involved in the distribution of the material to multiple locations within the construction site then they would have to be paid prevailing wages for the type of work performed: laborer, equipment operator, electrician, ironworker, plumber, etc.
- An example of this would be where delivery of drywall is made to a building and the delivery personnel distribute the drywall from one "stockpile" location to further sub-locations on each floor. Distribution of material around a construction site is the job of a laborer/tradesman and not a delivery personnel.

Electrician

- Installation or maintenance of telecommunication, LAN wiring or computer equipment.
- Low voltage wiring.

Fork Lift Operator

- Laborers Group 4) Mason Tenders operates forklift solely to assist a mason to a maximum height of nine (9) feet only.
- Power Equipment Operator Group 9 operates forklift to assist any trade, and to assist a mason to a height over nine (9) feet.

Glaziers

- Installs light metal sash, head sills, and 2-story aluminum storefronts.
- Installation of aluminum window walls and curtain walls is the 'Soidtwork of the Glaziers and Ironworkers classification which requires either a blended rate or equal composite workforce.

Ironworkers

- Handling, sorting, and installation of reinforcing steel (rebar).
- Installation of aluminum window walls and curtain walls is the "joint work" of the Glaziers and Ironworkers classification which requires either a blended rate or equal composite workforce. Insulated metal and insulated composite panels are still installed by the Ironworker.
- Metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation.

Insulator

Installing fire stopping systems/materials for "Penetration Firestop Systems":
transit to cables, electrical conduits, insulated pipes, sprinkler pipe penetrations,
ductwork behind radiation, electrical cable trays, fire rated pipe penetrations,
natural polypropylene, HVAC ducts, plumbing bare metal, telephone and
communication wires, and boiler room ceilings. Past practice using the
applicable licensed trades, Plumber, Sheet Metal, Sprinkler Fitter, and
Electrician, is not inconsistent with the Insulator classification and would be
permitted.

Lead Paint Removal

- Painter Rate
 - 1. Removal of lead paint from bridges.
 - 2. Removal of lead paint as preparation of any surface to be repainted.
 - 3. Where removal is on a Demolition project prior to reconstruction.
- Laborer Rate
 - 1. Removal of lead paint from any surface NOT to be repainted.
 - 2. Where removal is on a *TOTAL* Demolition project only.

Roofers

• Preparation of surface, tear-off and/or removal of any type of roofing, and/or clean-up of any areas where a roof is to be relaid.

Sheet Metal Worker

• Fabrication, handling, assembling, erecting, altering, repairing, etc. of coated metal material panels and composite metal material panels when used on building exteriors and interiors as soffits, facia, louvers, partitions, wall panel siding, canopies, cornice, column covers, awnings, beam covers, cladding, sun shades, lighting troughs, spires, ornamental roofing, metal ceilings, mansards, copings, ornamental and ventilation hoods, vertical and horizontal siding panels, trim, etc. The sheet metal classification also applies to the vast variety of coated metal material panels and composite metal material panels that have evolved over the years as an alternative to conventional ferrous and non-ferrous metals like steel, iron, tin, copper, brass, bronze, aluminum, etc. Insulated metal and insulated composite panels are still installed by the Iron Worker. Fabrication, handling, assembling, erecting, altering, repairing, etc. of architectural metal roof, standing seam roof, composite metal roof, metal and composite bathroom/toilet partitions, aluminum gutters, metal and composite lockers and shelving, kitchen equipment, and walk-in coolers.

Truck Drivers

- Truck Drivers delivering asphalt are covered under prevailing wage while on the site and directly involved in the paving operation.
- Material men and deliverymen are not covered under prevailing wage as long as they are not directly involved in the construction process. If, they unload the material, they would then be covered by prevailing wage for the classification they are performing work in: laborer, equipment operator, etc.
- Hauling material off site is not covered provided they are not dumping it at a location outlined above.
- Driving a truck on site and moving equipment or materials on site would be considered covered work, as hs is part of the construction process.

Any questions regarding the proper classification should be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd, Wethersfield, CT 06 109 at (860) 263-6543.

CONNECTICUT DEPARTMENT OF LABOR Wage and Workplace Standards Division

FOOTNOTES

Please Note: If the "Benefits" listed on the schedule for the following occupations includes a letter(s) (+ a or + a+b for instance), refer to the information below.

Benefits to be paid at the appropriate prevailing wage rate for the listed occupation.

If the "Benefits" section for the occupation lists only a dollar amount, disregard the information below.

Bricklayers, Cement Masons, Cement Finishers, Plasters, Stone Masons (Building Construction)

(Residential- Hartford, Middlesex, New Haven, New London and Tolland Counties)

a. Paid Holiday: Employees shall receive 4 hours for Christmas Eve holiday provided the employee works the regularly scheduled day before and after the holiday. Employers may schedule work on Christmas Eve and employees shall receive pay for actual hours worked in addition to holiday pay.

Bricklayer (Residential- Fairfield County)

a. Paid Holiday: If an employee works on Christmas Eve until noon he shall be paid for 8 hours.

Electricians

Fairfield County: West of the Five Mile River in Norwalk

a. \$2.00 per hour not to exceed \$14.00 per day.

Elevator Constructors: Mechanics

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, plus the Friday after Thanksgiving.
- b. Vacation: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

Glaziers

a. Paid Holidays: Labor Day and Christmas Day.

Power Equipment Operators

(Heavy and Highway Construction & Building Construction)

a. Paid Holidays: New Year's Day, Good Friday, Memorial day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, provided the employee works 3 days during the week in which the holiday falls, if scheduled, and if scheduled, the working day before and the working day after the holiday. Holidays falling on Saturday may be observed on Saturday, or if the employer so elects, on the preceding Friday.

Ironworkers

a. Paid Holiday: Labor Day provided employee has been on the payroll for the 5 consecutive workdays prior to Labor Day.

Laborers (Tunnel Construction)

a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. No employee shall be eligible for holiday pay when he fails, without cause, to work the regular workday preceding the holiday or the regular workday following the holiday.

Roofers

a. Paid Holidays: July 4th, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

Sprinkler Fitters

a. Paid Holidays: Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

Truck Drivers

(Heavy and Highway Construction & Building Construction)

a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas day, and Good Friday, provided the employee has at least 31 calendar days of service and works the last scheduled day before and the first scheduled day after the holiday, unless excused.

Project: New London Turnpike Sidewalk Extension

Minimum Rates and Classifications for Heavy/Highway Construction

H 12825

Connecticut Department of Labor Wage and Workplace Standards Division

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number: GL2010-23 Project Town: Glastonbury

FAP Number: State Number:

Project: New London Turnpike Sidewalk Extension

CLASSIFICATION 01) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters. **See Laborers Group 7**	Hourly Rate	Benefits
1) Boilermaker	\$33.79	34% + 8.96
1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	\$32.10	18.83
2) Carpenters, Piledrivermen	\$29.00	17.80
2a) Diver Tenders	\$29.00	17.80

Project: New London Turnpike Sidewalk Extension		
3) Divers	\$37.46	17.80
4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water,	\$37.65	14.20
etc.), Spray		
4 \ D : (¢20.17	1455
4a) Painters: Brush and Roller	\$28.17	14.55
4b) Painters: Spray Only	\$31.17	14.55
4c) Painters: Steel Only	\$30.17	14.55
4d) Painters: Blast and Spray	\$31.17	14.55
4e) Painters: Tanks, Tower and Swing	\$30.17	14.55
5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2	\$35.40	19.51
V-1,2,7,8,9)	φ 33.4 0	17.31

Project: New London Turnpike Sidewalk Extension		
6) Ironworkers: (Ornamental, Reinforcing, Structural, and Precast Concrete Erection	\$32.75	25.08 + a
7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2) and Pipefitters (Including HVAC Work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4 G-1, G-2, G-8, G-9)	\$36.32	21.26
LABORERS		
8) Group 1: Laborer (Unskilled); Common or General	\$24.25	14.45
9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen, air tool operator	\$24.50	14.45
10) Group 3: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license)- Last updated 4/8/09	\$24.75	14.45
11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators, block pavers and curb setters	\$24.75	14.45
12) Group 5: Toxic waste workers (non-mechanical systems) - Last updated 4/8/09	\$26.25	14.45

Project: New London Turnpike Sidewalk Extension		
13) Group 6: Blasters	\$26.00	14.45
Group 7: Asbestos Removal, non-mechanical systems (does not include leaded joint pipe) - Last updated 4/8/09	\$25.25	14.45
Group 8: Traffic control signalmen	\$16.00	14.45
LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and Liner Plate Tunnels in Free Air Last updated 4/5/09		
13a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Tenders	\$28.58	14.45 + a
	427.75	11.15
13b) Brakemen, Trackmen	\$27.75	14.45 + a
CLEANING, CONCRETE AND CAULKING TUNNELLast updated		
4/5/09		
14) Concrete Workers, Form Movers, and Strippers	\$27.75	14.45 + a

Project: New London Turnpike Sidewalk Extension		
15) Form Erectors	\$28.03	14.45 + a
ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL IN FREE AIR:Last updated 4/5/09		
16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers	\$27.75	14.45 + a
17) Laborers Topside, Cage Tenders, Bellman	\$27.65	14.45 + a
18) Miners	\$28.58	14.45 + a
TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR:Last updated 4/5/09		
18a) Blaster	\$34.19	14.45 + a
19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge Tenders	\$34.02	14.45 + a

Project: New London Turnpike Sidewalk Extension		
20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	\$32.30	14.45 + a
21) Mucking Machine Operator	\$34.70	14.45 + a
TRUCK DRIVERS(*see note below)		
Two axle trucks	\$26.98	13.48 + a
Three axle trucks; two axle ready mix	\$27.08	13.48 + a
Three axle ready mix	\$27.13	13.48 + a
Four axle trucks, heavy duty trailer (up to 40 tons)	\$27.18	13.48 + a
Four axle ready-mix	\$27.23	13.48 + a
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Project: New London Turnpike Sidewalk Extension		
Heavy duty trailer (40 tons and over)	\$27.43	13.48 + a
Specialized earth moving equipment other than conventional type on-the road trucks and semi-trailer (including Euclids)	\$27.23	13.48 + a
POWER EQUIPMENT OPERATORS		
Group 1: Crane handling or erecting structural steel or stone, hoisting engineer (2 drums or over), front end loader (7 cubic yards or over), Work Boat 26 ft. & Over. (Trade License Required)	\$34.05	17.75 + a
Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer). (Trade License Required)	\$33.73	17.75 + a
Group 3: Excavator; Cranes (under 100 ton rated capacity), Gradall; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade (slopes, shaping, laser or GPS, etc.). (Trade License Required)	\$32.99	17.75 + a
Group 4: Trenching Machines; Lighter Derrick; CMI Machine or Similar; Koehring Loader (Skooper)	\$32.60	17.75 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Spreader; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	\$32.01	17.75 + a

Project: New London Turnpike Sidewalk Extension		
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	\$32.01	17.75 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	\$31.70	17.75 + a
Group 7: Asphalt Roller; Concrete Saws and Cutters (ride on types); Vermeer Concrete Cutter; Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and Under Mandrel).	\$31.36	17.75 + a
Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine.	\$30.96	17.75 + a
Group 9: Front End Loader (under 3 cubic yards), Skid Steer Loader regardless of attachments (Bobcat or Similar); Fork Lift, Power Chipper; Landscape Equipment (including hydroseeder).	\$30.53	17.75 + a
Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.	\$28.49	17.75 + a
Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment.	\$28.49	17.75 + a
Group 12: Wellpoint Operator.	\$28.43	17.75 + a

Project: New London Turnpike Sidewalk Extension		
Group 13: Compressor Battery Operator.	\$27.85	17.75 + a
Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).	\$26.71	17.75 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	\$26.30	17.75 + a
Group 16: Maintenance Engineer/Oiler	\$25.65	17.75 + a
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	\$29.96	17.75 + a
Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	\$27.54	17.75 + a
**NOTE: SEE BELOW		
LINE CONSTRUCTION(Railroad Construction and Maintenance)Last updated 4/17/09		

Project: New London Turnpike Sidewalk Extension		
20) Lineman, Cable Splicer, Dynamite Man	\$35.65	10.70 + 6.25%
21) Heavy Equipment Operator	\$22.09	10.70 + 6.25%
22) Equipment Operator, Tractor Trailer Driver, Material Men	\$30.30	10.70 + 6.25%
23) Driver Groundmen	\$26.74	10.70 + 6.25%
LINE CONSTRUCTIONLast updated 4/17/09		
24) Driver Groundmen	\$30.92	6.5% + 9.70
25) Groundmen	\$22.67	6.5% + 6.20
26) Heavy Equipment Operators	\$37.10	6.5% + 10.70

Project: New London Turnpike Sidewalk Extension		
27) Linemen, Cable Splicers, Dynamite Men	\$41.22	6.5% + 12.20
28) Material Men. Tractor Trailer Drivers. Equipment Operators	\$35.04	6 5% + 10 45

Project: New London Turnpike Sidewalk Extension

Welders: Rate for craft to which welding is incidental.

*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.

**Note: Hazardous waste premium \$3.00 per hour over classified rate

Crane with 150 ft. boom (including jib) - \$1.50 extra

Crane with 200 ft. boom (including jib) - \$2.50 extra

Crane with 250 ft. boom (including jib) - \$5.00 extra

Crane with 300 ft. boom (including jib) - \$7.00 extra

Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyperson instructing and supervising the work of each apprentice in a specific trade.

~Connecticut General Statute Section 31-55a: Annual Adjustments to wage rates by contractors doing state work ~

The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.

Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.

It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.

The annual adjustments will be posted on the Department of Labor's Web page: www.ct.gov/dol.

The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.

All subsequent annual adjustments will be posted on our Web Site for contractor access.

Project: New London Turnpike Sidewalk Extension

Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage

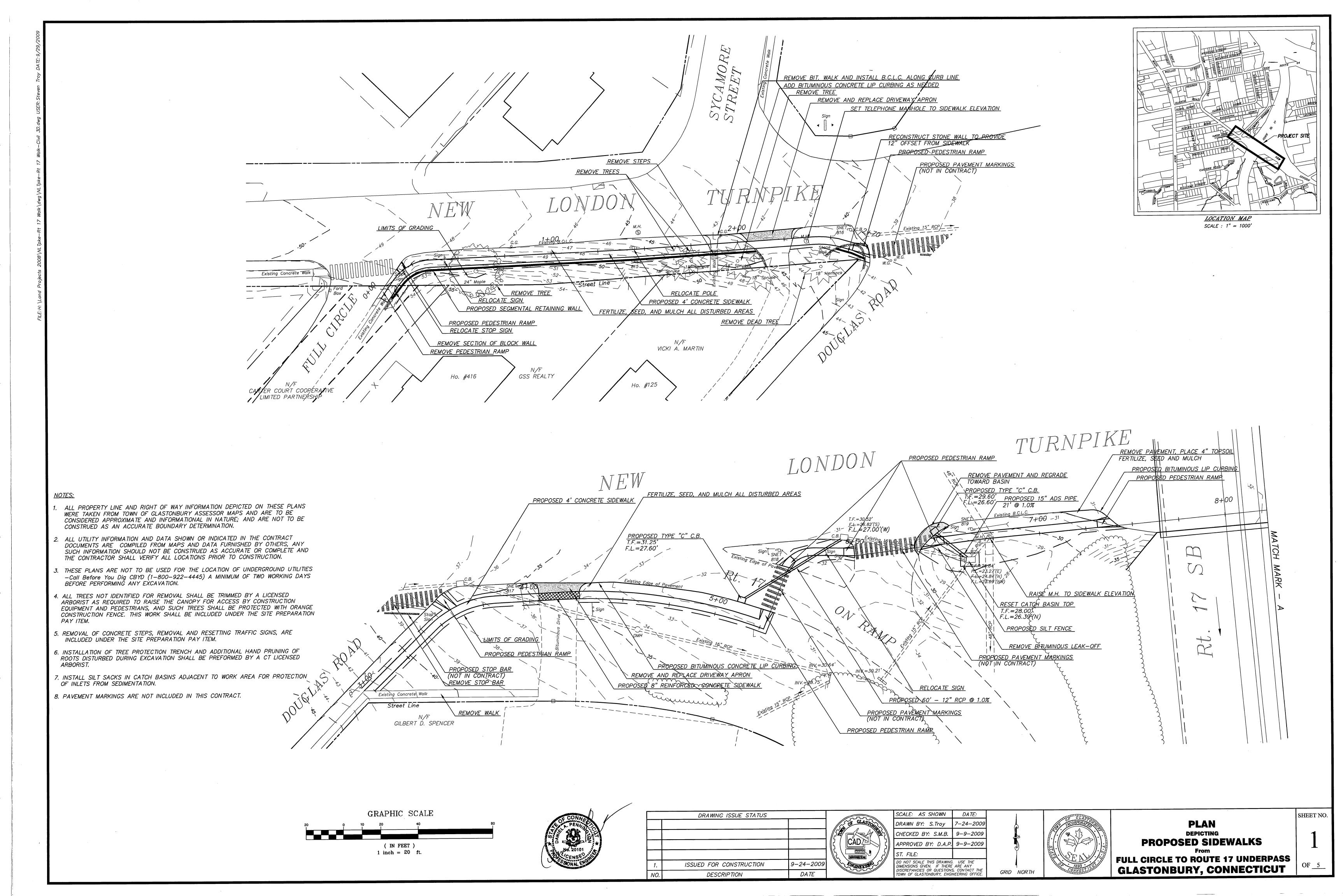
All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

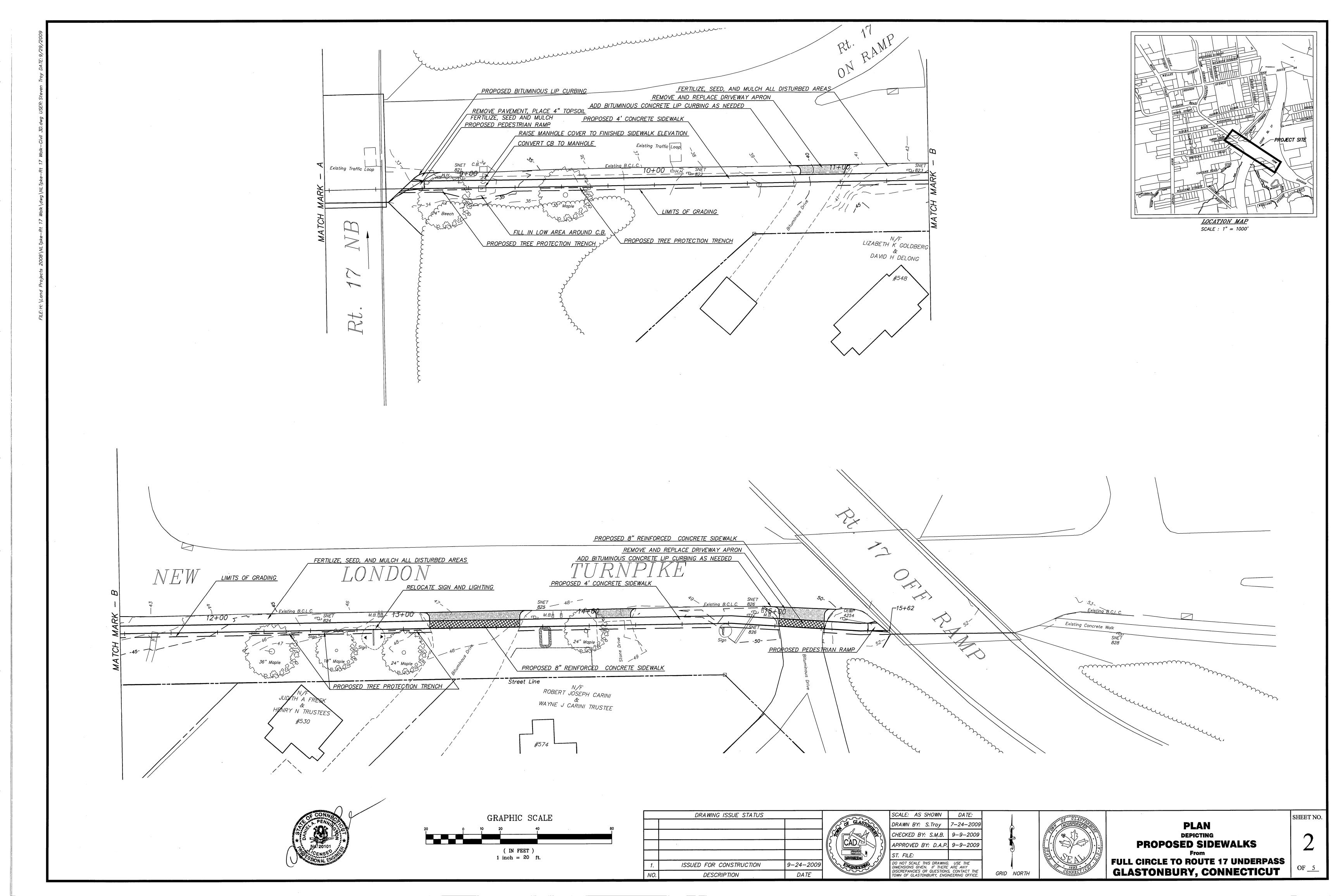
All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

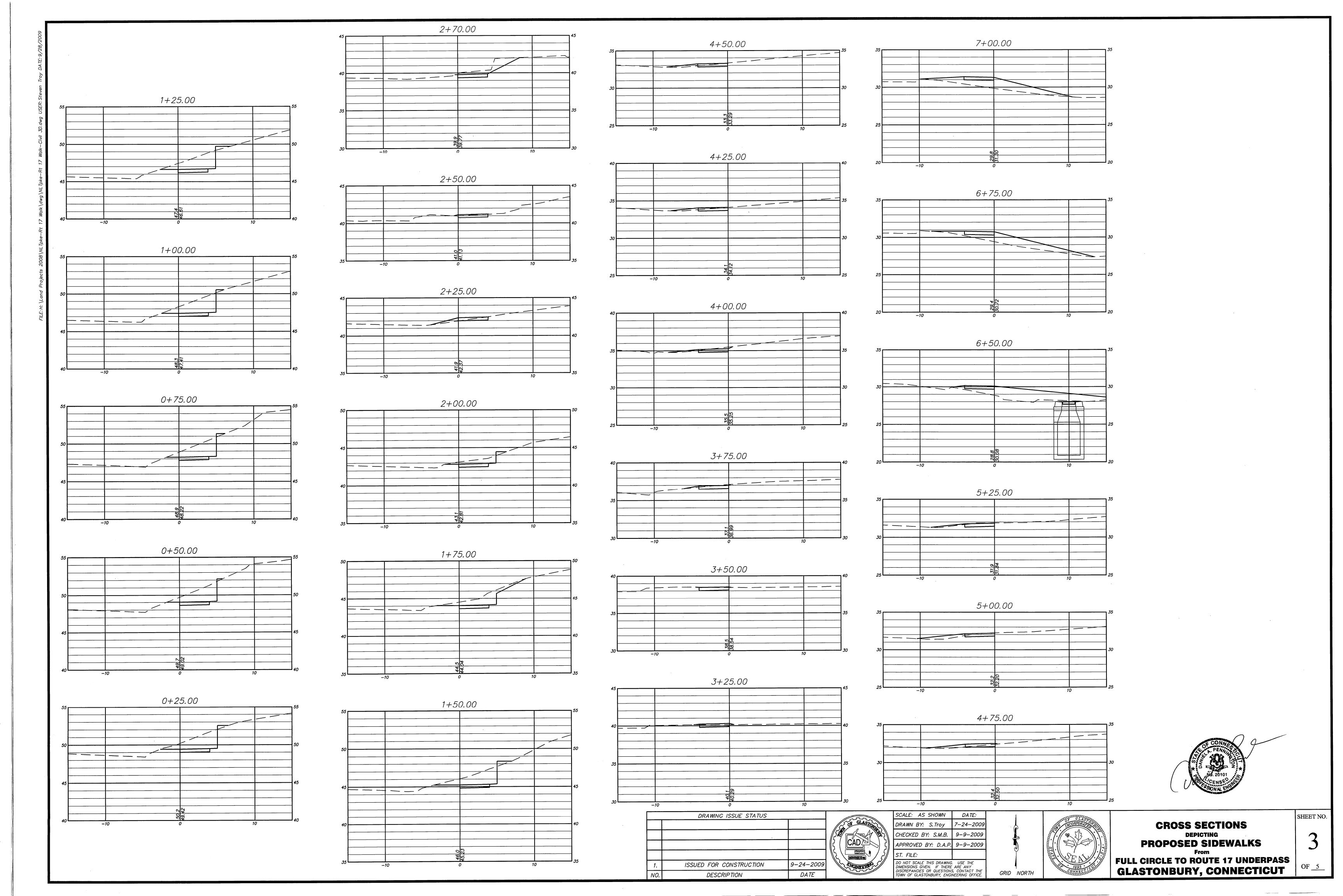
Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

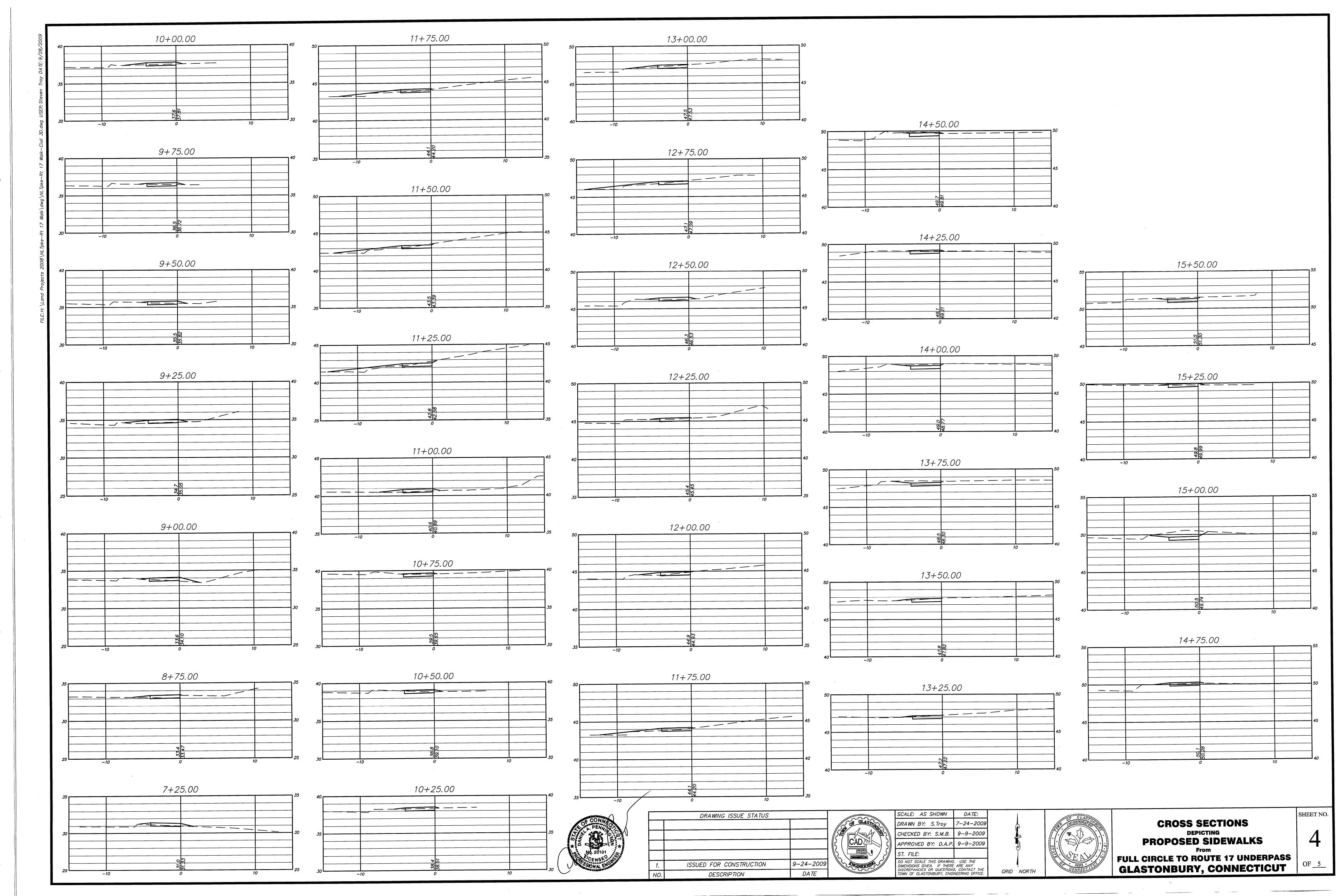
~~Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).

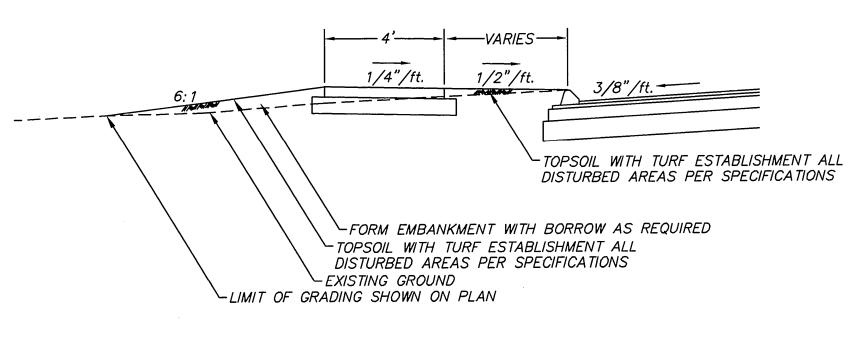
Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.



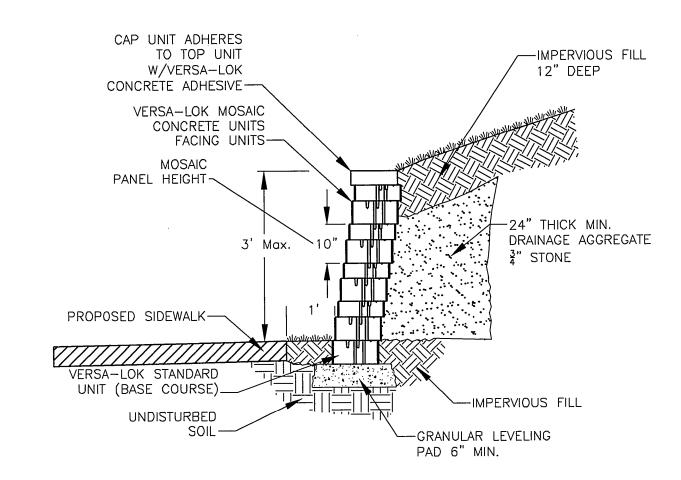




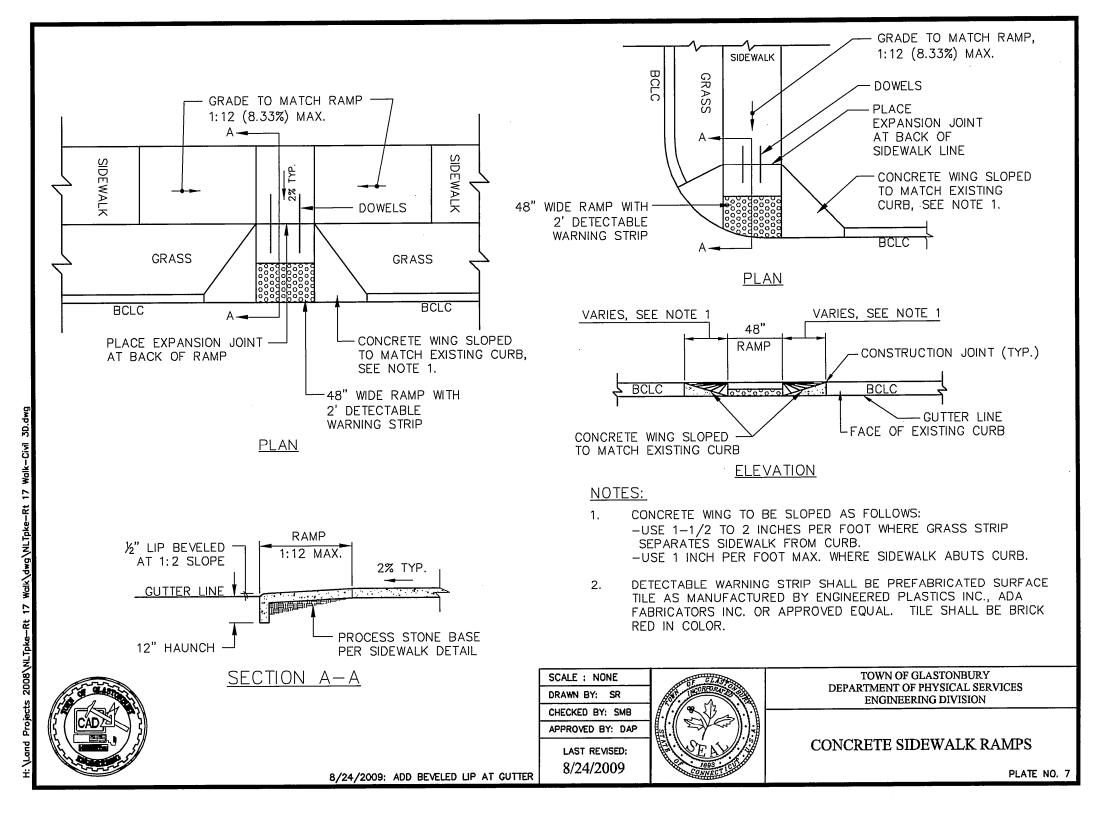


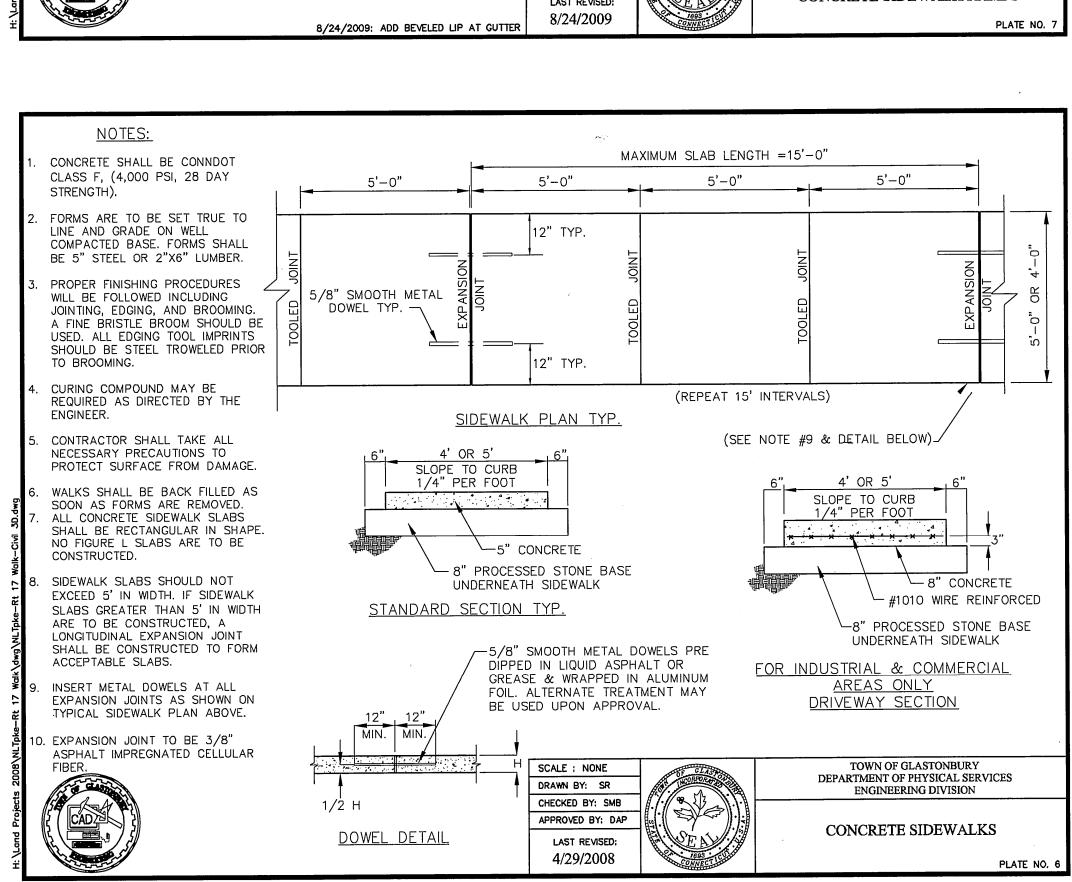


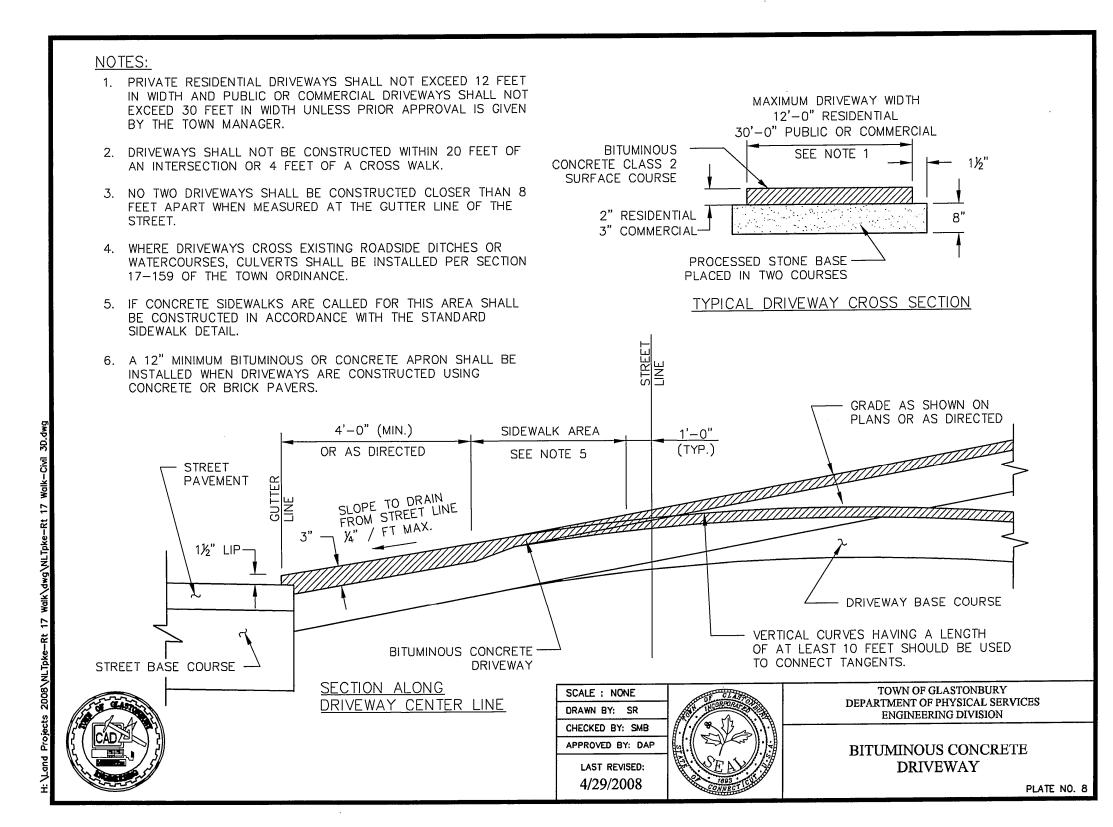
TYPICAL CROSS SECTION (NOT TO SCALE)

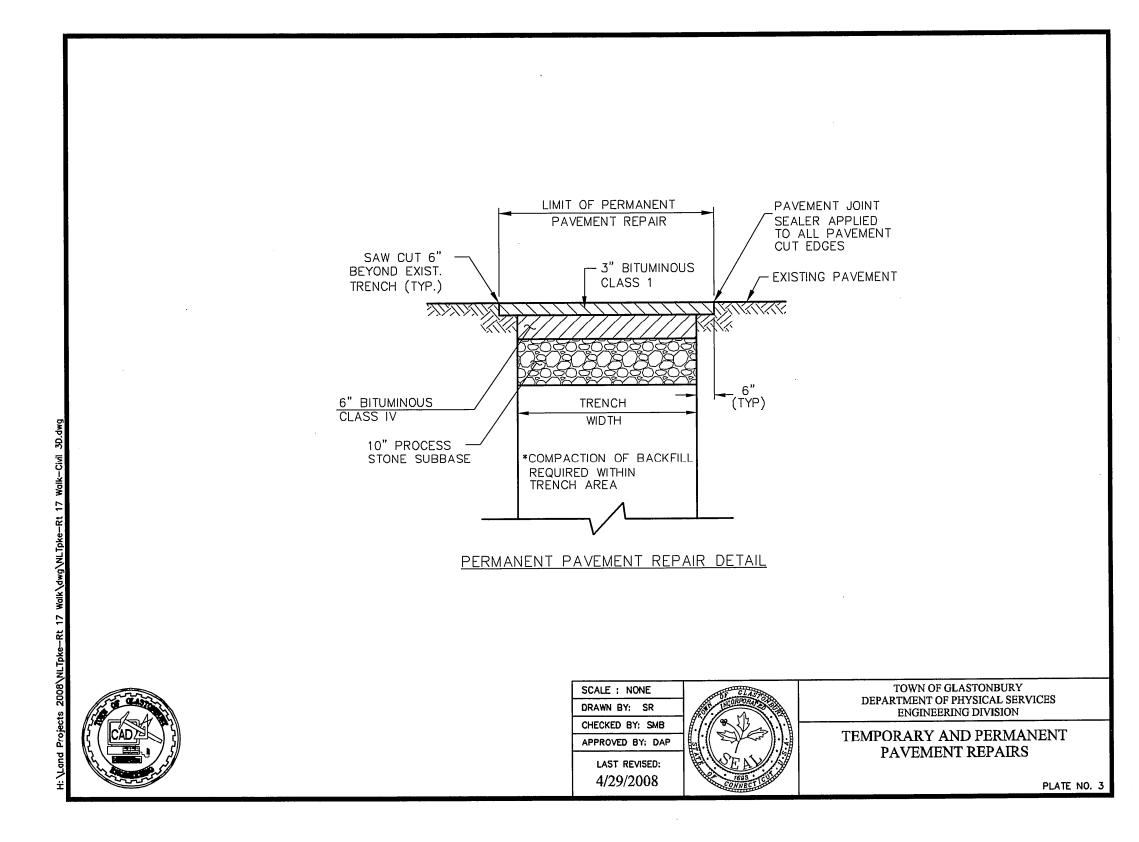


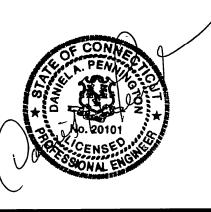
TYPICAL SECTION-UNREINFORCED RETAINING WALL MOSAIC SCALE: NONE



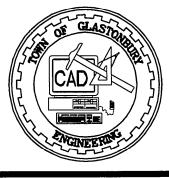








···	DRAWING ISSUE STATUS		
1.	ISSUED FOR CONSTRUCTION	9-24-2009	1/2/2
NO.	DESCRIPTION	DATE	



SCALE: AS SHOWN DATE:

DRAWN BY: S. Troy 7-24-2009

CHECKED BY: S.M.B. 9-9-2009

APPROVED BY: D.A.P. 9-9-2009

ST. FILE:

DO NOT SCALE THIS DRAWING. USE THE DIMENSIONS GIVEN. IF THERE ARE ANY DISCREPANCIES OR QUESTIONS, CONTACT THE TOWN OF GLASTONBURY, ENGINEERING OFFICE.



GRID NORTH

CONSTRUCTION DETAILS
FOR
PROPOSED SIDEWALKS
From
FULL CIRCLE TO ROUTE 17 UNDERPASS
GLASTONBURY, CONNECTICUT

SHEET NO

5

OF 5