TOWN OF GLASTONBURY INVITATION TO BID

BID # DATE & TIME REQUIRED

GL-2013-29 New London Turnpike Pedestrian Bridge May 2, 2013 11:00 A.M.

The Town of Glastonbury is currently seeking bids for replacement of the existing 6-foot wide by 60-foot long pedestrian bridge for New London Turnpike at Hubbard Brook. The existing steel pedestrian bridge will be removed as part of this contract and a new pedestrian bridge installed on the existing bridge abutments.

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

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.

The Town of Glastonbury is an Affirmative Action/Equal Opportunity Employer. Minority/Women/Disadvantaged Business Enterprises are encouraged to bid.

Mary F. Visone Purchasing Agent

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ATTACHMENT A – RECORD 1987 GEOTECHNICAL REPORT FOR ABUTMENT DESIGN

<u>ATTACHMENT B – RECORD 1987 SHOP DRAWING FOR EXISTING BRIDGE</u>

<u>ATTACHMENT C – RECORD 1988 SITE PLAN SHOWING EXISTING BRIDGE</u>

NEW LONDON TURNPIKE PEDESTRIAN BRIDGE INFORMATION FOR BIDDERS

- 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. The bid total cost shall be arrived at by the mathematical calculation of the unit price multiplied times the number of units specified for each line item, and the total sum of all line items in the bid. In the event that the Town finds computational errors in a respondent's bid proposal, the bid total cost shall be recalculated by the Town based on the unit prices contained in the bid proposal.
- 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. <u>If a bid involves any exception from stated specifications, they must be clearly noted as exceptions, underlined, and attached to the bid.</u>
- 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

NEW LONDON TURNPIKE PEDESTRIAN BRIDGE INFORMATION FOR BIDDERS

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

- 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 8, 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/proposal.

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.

NEW LONDON TURNPIKE PEDESTRIAN BRIDGE INFORMATION FOR BIDDERS

- 19. It is the responsibility of the bidder to check the Town's website before submitting bid for addendums posted prior to bid opening.
- 20. <u>Each bid shall also include a description of three (3) projects completed by the bidder with references</u> to demonstrate successful experience with similar projects.

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

NOTE:

Any technical questions regarding this bid shall be made in writing (email acceptable) and directed to Stephen Braun, Assistant Town Engineer, 2155 Main Street, PO Box 6523, Glastonbury, CT 06033; stephen.braun@glastonbury-ct.gov. Telephone (860) 652-7743 between the hours of 8:00 a.m. – 4:30 p.m. For administrative questions concerning this bid/proposal, please contact Mary F. Visone, Purchasing Agent, at (860) 652-7588 or email the Purchasing Department at purchasing@glastonbury-ct.gov. All questions, answers, and/or addenda, as applicable will be posted on the Town's website at www.glastonbury-ct.gov. (Upon entering the website click on Bids & RFP's). The request must be received at least five (5) business days prior to the advertised response deadline. It is the respondent's responsibility to check the website for addenda prior to submission of any bid/proposal.

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.
- O1.02 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.
- O1.03 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.
- O1.04 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.

02.00 SUPERINTENDENT

O2.01 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

O3.01 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.

04.00 PERMITS

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.

05.00 PROPERTY ACCESS

- O5.01 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.
- O5.02 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.

05.03 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.
- O6.03 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.
- 15.02 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.
- O1.02 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.
- The Town has obtained permission from the owner of the adjacent private road known as Rockhaven drive to use the 300 foot section of this road extending from the intersection of New London Turnpike for the execution of the work under this contract. This permission was granted for a one-day time period, and allows for closure of Rockhaven Drive and use of this paved area to stage the crane, bridges, and other supporting equipment. This is described in further detail in Section 600.7 of the Detailed Construction Specifications.

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.
- O2.03 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.

NEW LONDON TURNPIKE PEDESTRIAN BRIDGE SPECIAL CONDITIONS

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 and the Board of Education, 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 Insurance 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. <u>Commercial General Liability</u>:
 - 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.

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
- The Bidder shall direct its Insurer to provide a Certificate of Insurance to the Town before any work is performed. The Contractor shall be responsible to notify the Town 30 days in advance with written notice of cancellation or non-renewal. The Certificate shall evidence all required coverage on the General Liability and Auto Liability policies including the Additional Insured and Waiver of Subrogation on the General Liability policy. The Bidder shall provide the Town copies of any such insurance policies upon request.
- INDEMNIFICATION: To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Town and the Board of Education 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) to the extent 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.

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

O6.01 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 not 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. Waste disposal guidelines for the Bulky Waste facility are published on the Town web site at the address shown below. Each bidder shall have reviewed and understand these guidelines prior to submitting a bid for the project.

http://www.glastonbury-ct.gov/Modules/ShowDocument.aspx?documentid=699

Acceptable materials generally include such materials as brush, stumps, demolition materials, and excess excavated earth materials. Unacceptable materials generally include such items as carpet, appliances, upholstered furniture; hazardous wastes such as pesticides, oil based paints and thinners; or other wastes as designated by the State Department of Environmental Protection. Demolition material cannot contain asbestos or other hazardous materials.

The Contractor shall 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.

10.00 PROTECTION OF EXISTING UTILITIES

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.

11.00 TIME FOR COMPLETION/NOTICE TO PROCEED

11.01

Within ten (10) calendar days after the date of the Notice of Award, the Contractor must 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.

- 11.02 Shop drawings shall be submitted within thirty (30) calendar days of the Notice to Proceed / Purchase Order. Shop drawings shall reflect field measurements taken by the Contractor to confirm all dimensions.
- 11.03 Installation of the proposed bridge shall be completed within ninety (90) calendar days of receipt of the approved shop drawing by the Contractor.

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 \$250.00 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 record drawings included as ATTACHMENT B and ATTACHMENT C are informational drawings included for use of the Contractor. These plans do not necessarily reflect existing conditions, and all dimensions shown shall be verified in the field by the Contractor.

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 existing property or easement boundaries as necessary for proper execution of the work. 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 WORK AND RETAINAGE

- 18.01 Extra and cost plus work shall be governed by Article 1.04.05 and Article 1.09.04 of the Form 816.
- 18.02 Retainage shall be governed by Article 1.09.06 of the Form 816, except that the retainage amount shall be equal to five (5) percent.

19.00 SUBMITTALS AND MATERIALS TESTING

- 19.01 The Contractor shall provide source and supply information, sieve analysis, and material samples for gravel subbase, process stone base, modified riprap, and other granular materials to the Town for review and approval. The Town shall retain a lab for testing of these materials as required and shall perform in place compaction testing at no expense to the Contractor.
- 19.02 Shop drawings / catalog cuts shall be provided by the Contractor for all pre-cast concrete structures, pipes and fittings, erosion control products, seed mixes, and other items to be supplied for review and approval by the Engineer as described in the specifications and the Form 816.
- 19.03 Mix designs for all bituminous and portland cement concrete materials shall be provided by the Contractor to the Engineer for review and approval.
- 19.04 Certified Materials Test Reports and Materials Certificates shall be provided for all products and materials to be provided under this contract as described in these specifications and the Form 816.

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002.0 PREPARATION OF SITE

- 002.1 <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.
- 002.2 Tree Removal: No tree removal is required as part of this contract.
- O02.3 Tree Trimming: Trimming of trees by a Connecticut Licensed Arborist is included under this item as required for clearance of construction equipment to remove the existing bridge and install the proposed bridge. When the canopy of a tree must be elevated for clearance above the proposed improvements, trimming shall be done around the entire circumference of the tree.
- O02.4 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.

Occ.5 Clearing: 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 subgrade 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.

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.
- 301.3 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.

301.6

<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, materials, 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.

503.0 REMOVAL OF SUPERSTRUCTURE

503.1 <u>General</u>: This work shall include the removal and satisfactory disposal of the existing pedestrian bridge superstructure, including railings and decking, the removal of which is necessary to the final completion of the work. The masonry abutments and associated anchor bolts are to be reused, therefore work under this item shall also include the protection of existing masonry substructure and anchor bolts.

The Town does not want to salvage the existing pedestrian bridge. As such, the entire existing pedestrian bridge shall be removed and disposed of by the Contractor at an appropriate metal recycling facility. This item cannot be disposed of at the Town's Bulky Waste Facility.

- Materials: The materials required for this work shall be as shown on the plans or as ordered. All materials shall conform to the requirements of these specifications or the special provisions for the material in question; or if not so specified, they shall be of a quality satisfactory to the Engineer.
- 503.3 Construction Methods: Existing bridges which are to be removed by the Contractor shall be taken down and disposed of by such methods as he may propose, subject to the approval of the Engineer. Care shall be taken that the removal does not result in injury to any permanent construction or to adjoining property.
- 503.4 <u>Method of Measurement:</u> Being paid for on a lump sum basis, this item will not be measured for payment.
- Basis of Payment: This work will be paid for at the contract lump sum price for "Removal of Superstructure", at the location designated, complete including removal and disposal of the existing pedestrian bridge superstructure and all materials, equipment, tools and labor incidental thereto.

600.0 PRE-FABRICATED PEDESTRIAN BRIDGE

General: These specifications are for a fully engineered clear span bridge of welded steel construction (weathering steel) and shall be regarded as minimum standards for design and construction as manufactured by Excel Bridges of 12001 Shoemaker Avenue Santa Fe Springs, CA 90670, 1-800-548-0054 or approved equal.

The specific style of bridge required will be a "Continental Bridge Replacement" or approved equal with the following dimensions:

Width: Inside clear width of bridge shall be 6 feet 0 inches.

Span: Total span of bridge (out to out) shall be 60 feet 0 inches.

Camber: Bridge shall be cambered to offset dead load and appear flat.

The record shop drawing depicting the existing bridge that is being replaced is included with this bid for reference. The contractor shall verify in the field all existing dimensions shown on this plan and shall provide a bridge suitable for installation on the existing abutments utilizing the existing anchor bolts. In verifying dimensions, particular attention shall be paid to the anchor bolt layout as well as to the required structure depth in order to ensure that the finished walking surface of the proposed bridge matches flush with the top of the abutments and adjoining sidewalk.

The bridge manufacturer shall have been in the business of design and fabrication of welded steel pedestrian bridges for a minimum of five years and shall provide a list of five successful bridge projects of similar construction, each of which has been in service at least three years as part of the bid response. List the location, bridge size, owner and contact reference for each bridge.

600.2 <u>Design:</u> Open truss bridges shall be designed by a professional engineer who is experienced in pratt truss bridge design and top chord stability criteria elastic utilizing lateral restraints.

Complete design calculations and drawings signed and sealed by a professional engineer licensed in the State of Connecticut shall be submitted to the owner for approval prior to fabrication.

DESIGN CRITERIA: The design of the bridge shall be in accordance with the "American Institute of Steel Construction"; 13th Edition. Tubular members and their connections shall be designed per the CISC "Hollow Structural Sections Connections Manual" latest edition or the AISC Manual 13th Edition.

In addition to normal dead loads, the bridge shall be designed for the following:

UNIFORM LIVE LOAD: Pedestrian bridges shall be designed for an evenly distributed live load of 85 pounds per square foot in accordance with the AASHTO Guide Specification for the Design of Pedestrian Bridges.

VEHICLE LOAD: Bridges will also be designed to withstand a moving vehicle load which weighs 6,000 pounds (1,000 pounds per foot of bridge width). This concentrated load is in addition to a 20 pounds per square foot evenly distributed live load. The vehicle load shall be distributed such that 80% of the load is on the rear axle (per AASHTO).

WIND LOAD: All bridges shall be designed for a minimum wind load of 35 pounds per square foot (approximately 120 mph). The wind is calculated on the entire vertical surface of the bridge as if fully enclosed.

SEISMIC: All bridges shall be designed for seismic loads of the intensity required by local codes.

TEMPERATURE: Bridge shall be designed to accommodate a temperature differential of 120 degrees Fahrenheit. Slip pads of UHMW polyethylene shall be placed between the smooth surface of this setting plate and the smooth bearing plate of the bridge. At least 1" clearance shall be provided between the bridge and concrete abutments.

DEFLECTION: The vertical deflection of the bridge due to pedestrian live load shall not exceed 1/400 of the span length. The maximum deflection due to vehicular loads shall not exceed 1/800 of the span length. For pedestrian comfort, the load used for the deflection check be a minimum of 500 pounds per lineal foot of bridge or the uniform load used in Section 3.2, whichever is greater. The horizontal deflection due to lateral wind load shall not exceed 1/500 of the span length.

SUBSTRUCTURE: The existing concrete abutments were designed for a loading of approximately 17 tons per abutment, as shown in the geotechnical report included in Attachment A. The bridge manufacturer shall provide computations that demonstrate that this design loading is not exceeded by the proposed bridge, or shall provide a structural engineering analysis of the existing abutments to demonstrate that the existing abutments can support the proposed loading if in excess of the original design loading. All computations relative to the proposed design loading and adequacy of the substructure shall be sealed and stamped by a Professional Engineer registered in the State of Connecticut.

600.3 <u>Materials</u>:

All structural members shall have a minimum thickness of material of at least 3/16".

Unpainted Weathering Steel bridge shall be fabricated from ASTM A242 or ASTM A588 steel for plates and structural shapes and ASTM A606 or ASTM A847 for tubular sections. Minimum yield (Fy) shall be greater than 50,000 psi.

Wood Decking shall be nominal 3-inch thick No. 1 grade Southern Yellow Pine or Douglas Fir. Wood decking shall be treated to a minimum of 0.40 pounds of preservative per cubic foot of wood. The wood deck shall be designed for a 85 psf local loading condition. Floor planks shall be attached with at least two plated fasteners where planks cross supporting members. Planks shall be designed to carry a wheel footprint load per AASHTO.

Field splices shall be bolted with High Strength ASTM A325 bolts; type 3 bolts shall be used for weathering steel bridges.

Welding materials shall be in strict accordance with the American Welding Society (AWS). Structural welding code, D1.1 Filler metal as specified in 4.1 shall be used for the particular welding process required. Welders will be certified in accordance with AWS D1.1.

Anchor bolts shall conform to ASTM A449 with nuts and washers conforming to ASTM A563, Grade B. Anchor bolts, nuts, and washers shall be galvanized in conformance with ASTM A153. Anchor bolts shall be cast-in-place.

Elastomeric bearing pads shall be provided in the areas where the superstructure rests on concrete. Elastomeric bearing pads shall conform to the requirements of Section M.17.01 of the Form 816.

600.4 <u>Fabrication and Quality Control:</u>

Bridge fabricator shall be certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for Major Steel Bridge Structures with Fracture Critical and Sophisticated Paint Endorsements as set forth in the AISC Certification Program.

Workmanship, fabrication, and shop connections shall be in accordance with American Association of State Highway and Transportation Officials Specifications (AASHTO).

Welding operators shall be properly accredited experienced operators, each of whom shall submit satisfactory evidence of experience and skill in welding structural steel with the kind of welding to be used in the work, and who have demonstrated the ability to make uniform good welds meeting the size and type of weld required.

All welding shall utilize E70 or E80 series electrodes. The weld process used shall be Flux Core Arc Welding (FCAW) or Gas Metal Arch Welding (GMAW).

The connection of bridge end post to top chord should be a mitered joint with the exposed welds ground smooth. The connection of the floor beam in a pony truss system shall not be solely into the side of a tubular bottom chord without the use of additional stiffeners to prevent chord ovalization.

All structural elements used in the bridge shall be identified by heat number of the steel member used. Specific mill test reports and individual welder certificates shall be tracked and kept on file to be provided at the request of the owner or engineer.

The bridge design Professional Engineer shall inspect the bridge structure after fabrication and furnish a signed and sealed Conformance Report and Affidavit verifying that the bridge has been inspected by the Engineer and fabricated in accordance with the Engineer's design calculations and approved shop drawings. This inspection and report shall not be delegated to any other engineer or person. For weathering steel bridges, the report shall include a summary of computations of the corrosion index (per ASTM G101) for every heat number of structural steel used in the bridge to verify that the steel is of a weathering grade.

Each bridge shall be inspected by a Certified Welding Inspector that is qualified under the AWS QC-1 program. This inspection shall include as a minimum requirement the following: review of shop drawings, weld procedures, welder qualifications, and weld testing reports, visual inspection of welds and verification of overall dimensions and geometry of the bridge. A report shall be produced indicating the above items were reviewed and shall be signed and sealed by the CWI signifying compliance with AWS D1.1 codes.

600.5 Railings & Accessories:

All railings shall have a smooth inside surface with no protrusions or depressions. All ends of angles and tubes shall be closed and ground smooth.

Railings shall be suitable for bicycle use and shall be a minimum height of 54 inches above the floor deck.

Safety Rails: Continuous horizontal safety rails shall be located on the inside of the trusses. The safety rails shall conform to applicable standards for height, spacing, and other dimensions.

Toe Plate: A 5" steel channel shall be located 2" above the floor deck.

- 600.6 <u>Finishes:</u> All boldly exposed surfaces of weathering steel bridges shall be sand blasted in accordance with the Steel Structures Painting Council (SSPC) Surface Preparation Specification No. 7 "Brush Blast Cleaning".
- 600.7 <u>Delivery and Erection</u>: Hauling permits and freight charges are the responsibility of the Contractor. Unloading, splicing, bolting, and proper lifting equipment are the responsibility of the Contractor. The Contractor shall utilize the existing anchor bolts, or install new anchor bolts in accordance with the manufacturer's anchor bolt spacing dimensions and specifications.

The Contractor is hereby alerted that the hours of operation for the removal of the existing bridge and installation of the proposed pre-fabricated bridge are restricted to a single work day, between 7:00 AM and 5:00 PM, Monday through Friday.

The Town has obtained permission from the property owners of the adjacent private road (Rockhaven Drive) to use the first 300 feet of this road, beginning from the intersection with New London Turnpike, for staging of the crane and proposed bridge. This permission was granted for a single work-day to remove the existing bridge and install the proposed bridge. The Contractor shall provide a minimum of 14-days notice of the intended day of installation for the Town to notify and confirm the date with this property owner.

If a road closure/detour other than that described above is required for this operation, a plan depicting the proposed detour route with signing shall be submitted to the Engineer and Chief of Police a minimum of 14 calendar days prior to the intended date of delivery.

- Restoration: Restoration of all areas disturbed as part of this work shall also be included under this line item. Topsoil, Turf Establishment, and patching of Bituminous Concrete Pavement, as necessary, shall conform to applicable sections of the Form 816.
- 600.9 <u>Warranty</u>: The manufacturer shall warranty the pedestrian bridge against defects in material and workmanship for a period of fifteen years.
- Measurement and Payment: The pedestrian bridge will be paid for at the contract lump sum price as listed in the bid proposal for "Pre-fabricated Pedestrian Bridge", which price shall include all materials, equipment, labor, and work necessary for and incidental to the design, construction, delivery, unloading, assembly, and placement of the bridge on concrete abutments as shown in the contract plans, including all railings on the superstructure.

The cost of restoring any areas disturbed as part of the work, including topsoil, turf establishment, or pavement repairs, shall also be included in the lump sum price for "Prefabricated Pedestrian Bridge".

The cost of determining support reactions of the supplied bridge, comparing these to the existing allowable abutment design loadings, and any structural analysis by a licensed Professional Engineer shall be included in the lump sum price for "Pre-fabricated Pedestrian Bridge".

If the Contractor determines that the installation of new anchor bolts is necessary for the new bridge installation due to his proposed methods or requirements of the proposed bridge, than the new anchor bolts, and all work related to their installation, shall be included in the contract lump sum price for "Pre-fabricated Pedestrian Bridge".

NEW LONDON TURNPIKE PEDESTRIAN BRIDGE BID PROPOSAL

BID #GL-2013-29

Proposal of
(hereinafter called "Bidder"), organized and existing under the laws of the State of
, doing business as
<u> </u>
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-2013-29 in strict accordance with the Bid Documents, within the time set 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 certifies
as to their own organization that this bid has been arrived at independently without consultation,
communication, or agreement as to any matter relating to this bid with any other Bidder or with any
competitor.
The Bidder acknowledges receipt of the following:
Addendum #1
Addendum #2
Addendum #3

ITEM <u>NO</u> .	<u>DESCRIPTION</u>		QTY.	UNIT PRICE	EXTENSION
1.	Preparation of Site in accordance with Section 0 the Detailed Construction Spe		Lump Sum	\$/L.S.	\$
2.	Maintenance and Protection in accordance with Section 3 the Detailed Construction Special Cons	01.0 of	Lump Sum	\$/L.S.	\$
3.	Removal of Superstructure in accordance with Section 5 the Detailed Construction Sp	03.0 of	Lump Sum	\$/L.S.	\$
4.	Pre-Fabricated Pedestrian in accordance with Section 6 the Detailed Construction Spe	00.0 of	Lump Sum	\$/L.S.	\$
TOTAL	. BID AMOUNT:			\$	
WRITT	EN BID AMOUNT:				
The fol	R ITEMS REQUIRED WITH SI llowing bid checklist describ sal package. It is provided fo ed to be a complete list.	es items requ	ired for inclu	sion with the above-	
aooam	1. Included Bid Bond as	per Section 10	of the Inforn	nation for Bidders.	
	2. Included Disclosure of against the Bidder or	Past and Per	nding Mediation	on, Arbitration, and L	
	3. Included Qualification	s Statement a	s per Section	21 of the Information	n for Bidders.
	4. Checked Town web sit	e for Addend	ums and ackr	nowledged Addendu	ms on page BP-1.
	5. Acknowledged Code of	f Ethics on pa	age BP-3.		
	6. Clearly marked envelo	pe with Bid N	umber, Date,	and Time of opening	

TOWN OF GLASTONBURY BID / PROPOSAL		GL # or RPGL #	2013-29
DATE ADVERTISED	4/17/2013	DATE / TIME DUE	5/2/2013, 11:00 A.M.
NAME OF PROJECT	New London Tu	ırnpike Pedestrian Bridge	
It is the responsibility of the Number, Date and Time of Bid C THE TOWN'S WEBSITE BEFO OPENING.	Opening, and it al	so THE RESPONSIBILITY OF	THE BIDDER TO CHECK
CODE OF ETHICS: I/We have reviewed a copy of Consultant Acknowledgement F			
*Bidder is advised that effective proposal where the Bidder has			nnot consider any bid or
Respectfully submitted:			
Type or Print Name of Individua	ıl	Doing Business as (Trac	ie Name)
Signature of Individual		Street Address	
Title		City, State, Zip Code	
Date		Telephone Number/Fax	Number
E-Mail Address		SS# or TIN#	
(Seal – If bid is by a Corporation)			
Attest			

ATTACHMENT A RECORD 1987 GEOTECHNICAL REPORT FOR PEDESTRIAN BRIDGE ABUTMENT DESIGN

GEOTECHNICAL ENGINEERING REPORT NEW LONDON TURNPIKE PEDESTRIAN BRIDGE AT HUBBARD BROOK GLASTONBURY, CONNECTICUT PW-8314

for Town of Glastonbury Glastonbury, Connecticut





Consulting Geotechnical Engineers, Geologists and Hydrogeologists

110 National Drive Glastonbury, CT 06033 203/659-4248

17 September 1987 File No. 9597

Town of Glastonbury Public Works Engineer 2155 Main Street Glastonbury, CT 06033

Attention:

Mr. Billy Taylor, Town Engineer

Subject:

Geotechnical Engineering Report

New London Turnpike Pedestrian Bridge

At Hubbard Brook , PW-8314-Glastonbury, Connecticut

Gentlemen:

This letter provides final design recommendations regarding foundation design for the proposed 60 ft. long single-span, prefabricated steel pedestrian bridge across Hubbard Brook. Our services are provided in accordance with the proposal of 7 August 1987. Our foundation recommendations have been discussed with Purcell Associates, the structural engineers for the project.

I. INTRODUCTION

The proposed pedestrian bridge crosses Hubbard Brook approximately 30 ft. south of New London Turnpike in the Town of Glastonbury, Connecticut as shown on the Project Locus, Figure 1. The bridge will be a 60 ft. long, prefabricated steel superstructure supported on concrete abutments.

The scope of our services included monitoring field explorations and providing geotechnical engineering recommendations for foundation design.

Offices Cambridge, Massachusett Portland, Maine Bedford, New Hampshire

Affiliate H & A of New York Rochester New York

II. SITE CONDITIONS

An existing 15 in. dia. reinforced concrete sanitary sewer pipe is located 7 ft. north of the west abutment and 2 ft. north of the east abutment. Approximate invert elevations range from El. 55 to 55.5.

The west abutment is located on the edge of an existing asphalt parking lot and approximately 18 ft. west of the mapped edge of the brook. A small stand of trees is located within the footprint of the south one-half of the east abutment. The east abutment is planned to be located approximately 12 to 18 ft. east of the mapped edge of the brook.

The existing bank slopes range from approximately 1.8(H):1(V) to flatter than 2.0(H):1(V). The banks appear to be stable and riprap was observed on the existing slopes.

III. SUBSURFACE CONDITIONS

Three test pits were excavated using a John Deere backhoe operated by Town of Glastonbury Department of Public Works at the locations shown on Figure 2, Site and Subsurface Exploration Plan. The test pits were excavated outside the limits of the abutment footprint to depths ranging from 7 to 7.8 ft. The test pit locations were determined by taping from survey stakes provided by the Town of Glastonbury. Ground surface elevations were estimated from the topography shown on Figure 2 furnished by the Town of Glastonbury. Test pit logs are presented in Appendix A.

The test pits revealed a profile of near-surface soils consisting of the following units described below in order of increasing depth below the ground surface.

<u>Thickness Range in Feet</u>	Stratum Description
3.5 to 6.8	FILL composed of loose to medium dense brown and red brown silty fine SAND, little gravel, occasional cobbles and traces of glass, concrete, asphalt and wood
0.1+ to 3.3+ (TP2) (TP1)	FILL composed of very stiff red brown SILT, trace fine sand.
more than 0.6	Assumed NATURAL hard, red brown SILT, trace fine sand. Only encountered in TP3.



The test pits adjacent to the existing sewer excavation, TP1 and TP2, were terminated in the sewer excavation backfill. Only TP3 reached what was thought to be natural soil. No groundwater was encountered in the test pits during the time of investigation.

Two in-situ density tests were performed in the test pits. The results are as follows:

Test Pit	Depth in Feet	Dry Density (PCF)	Moisture (%)
TP1	4.2	94	12
TP3	6.9	96	6

IV. FOUNDATION DESIGN RECOMMENDATIONS

The west abutment is planned to be founded at El. 62 and the proposed east abutment at El. 62.5. These depths are approximately 3.5 to 4.0 ft. below the existing grade. The design load for each abutment is approximately 17 tons.

We recommend that the pedestrian bridge abutments be supported on footings constructed on a pad of compacted gravel fill. The footing should be designed for a bearing pressure not to exceed 1.0 ton per square foot (tsf). Existing soils should be excavated and replaced with gravel fill to El. 61 at the east abutment and to El. 59 at the west abutment. The gravel fill should extend a minimum to 2 ft. beyond the footing limits.

The recommended footing depth below lowest adjacent grade is 42 in. However, because non-frost susceptible gravel fill is recommended below the footing level, the depth of footing for frost protection can include the thickness of the gravel fill.

Riprap slopes are planned for the steeper fill slopes adjacent to the abutments, as illustrated on Figure 2. We recommend that riprap that exists on the present slope be restored to its original design condition.

Various amounts of fill were encountered in the test pits and in TP1, the fill could extend to a depth of 7 ft. below the planned footing level (to the bottom of sewer grade). Overexcavation of fill and replacement with compacted gravel fill can reduce but not eliminate the potential differential settlements. Total settlements of the abutments are estimated to be less than 2 inches and differential settlements less than 1 inch. Gravel fill material should be compacted in lifts not to exceed 8 in. and compacted with 4 passes of a hand guided vibratory plate



compactor. The gravel fill material (C.D.O.T., Form 813, material specification M.02.01) should be free of organic material or other deleterious substances and be well-graded within the following limits:

Sieve Size	Percent Finer by Weigh
3-1/2 in.	100
1-1/2 in.	55 -100
1/4 in.	25 - 60
# 10	15 - 45
# 40	5 - 25
#200	0 - 5

We appreciate the opportunity to participate in this project. If you have any questions or require additional information, please contact us.

Sincerely yours,

HALEY & ALDRICH, INC.

Dan T. Kinard Senior Engineer

John P. Dugan, Jr.

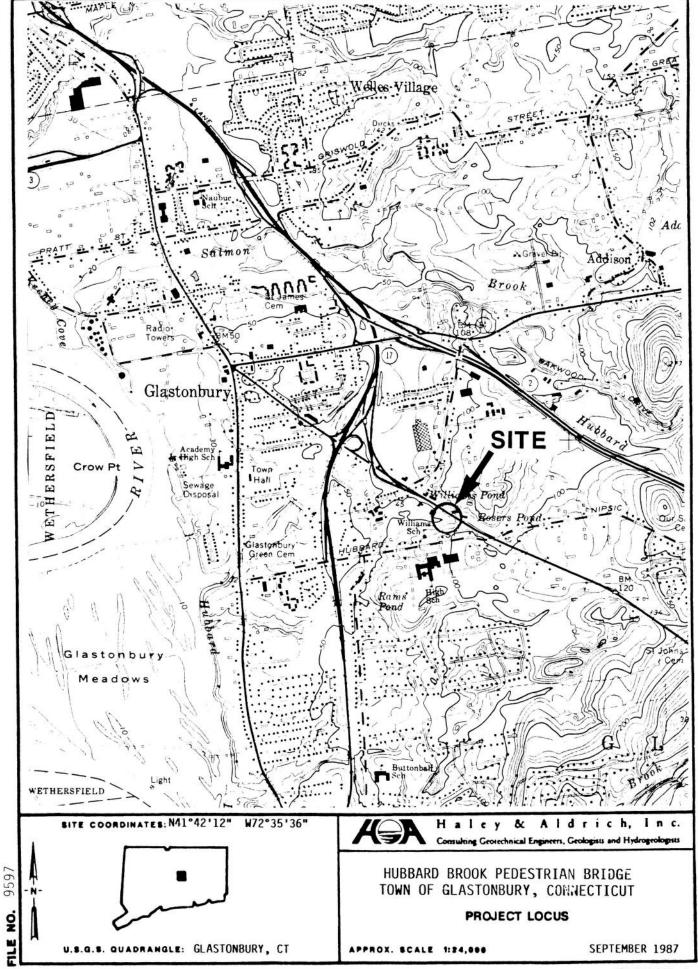
Vice President

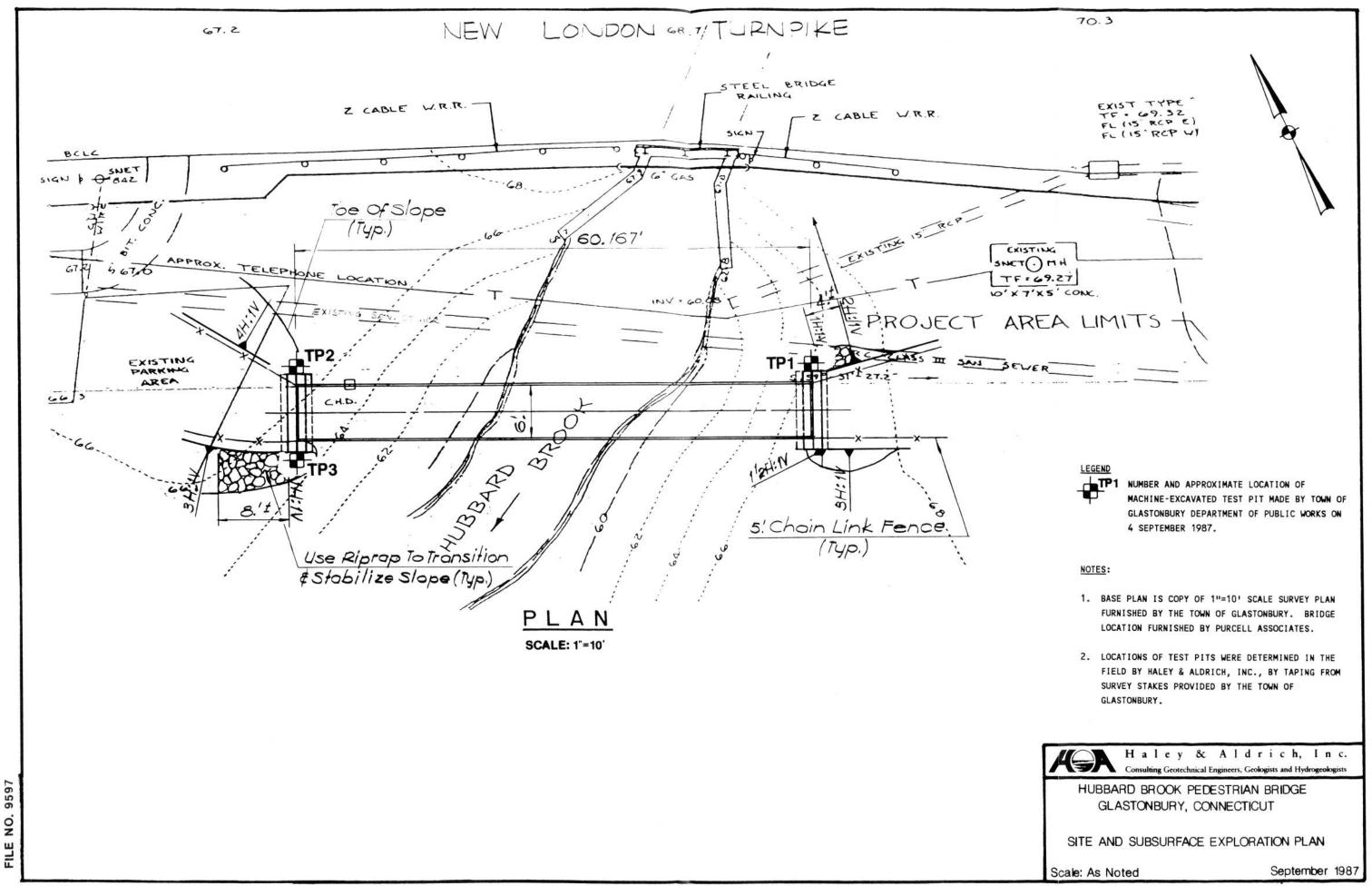
JPD/DTK:saf-HACT.249

Enclosures: Figure 1 - Project Locus

Figure 2 - Site and Subsurface Exploration Plan

Appendix A - Test Pit Reports





APPENDIX A TEST PIT REPORTS



			CH, INC		TEST PIT REPORT	TEST	PIT NO. TP 1
			TOW	N OF GL	ROOK PEDESTRIAN BRIDGE ASTONBURY	LOCA EAST	NO9597 TION: ABUTMENT - NORTH SIDE ATION:66 ft. (SEE NOTE
	RACT			N OF GL N DEERE	ASTONBURY	EXPL	ORATION DATE: 9-4-87
16.1.5		SAMPLE NUMBER	T		DESCRIPTION OF MATERIALS	INSPE	REMARKS
- 2	4.2	S-1	3.5	fir cor	Brown medium to fine silty ne SAND, little gravel, trace ncrete and asphalt -FILL- Brown SILT, trace fine sand -FILL- ottom of Exploration at 7.5 ft.		Occasional cobbles Proposed Bottom of Footing El. 62.5 (3.5 ft. depth) Observed to be Very Stiff dry
- 10 — - 12 —		Y JANIT	1		Elevation estimated from contours of figure 2. $ \frac{\text{PIT DIMENSIONS}}{12.0} \times \frac{5.0}{\text{(W)}} \times \frac{7.5}{\text{(D)}} = \frac{450}{\text{(D)}} $		0
					BOULDERS		JAR SAMPLES BAG SAMPLES
NOTEN	COUNT	RED T	χ .	HAS AFTE	2 20	Cu. Ft.	GROUNDWATER

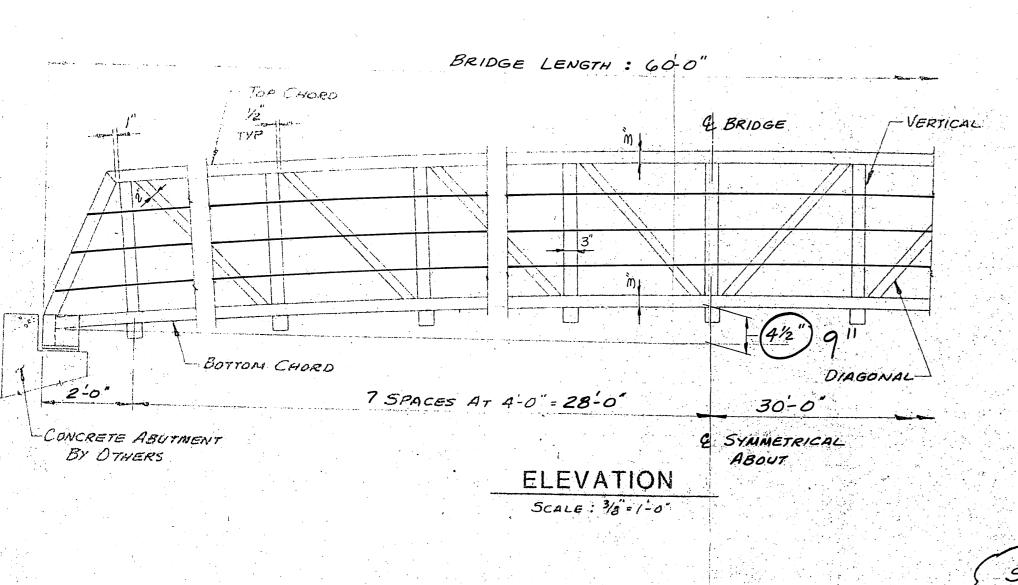
EQUIPMENT USED: JOHN DEERE STATE STATE SAMPLE SAND: CHANGE HUMBER SAND: THE PROPERTY OF THE P				CH, INC		TEST PIT REPORT	TEST	PIT NO. TP 2
Brown to Red Brown silty fine SAND, Occasional cobbles S-1 3.0 FILL- FILL- FILL- 6.8 S-2 6.9 Red Brown SILT, trace fine sand - FILL- Bottom of exploration at 7.0 ft FILL- Bottom of exploration at 7.0 ft REMARKS REMARKS REMARKS REMARKS REMARKS Occasional cobbles FIL 59.0 ft (see note) Observed to be Very Stiff dry Stiff	CLIER	NT:	OR:	TOM	IN OF GL	ASTONBURY	ELEV.	ABUTMENT - NORTH SIDE ATION: 65.8 (SEE NOTE) DRATION DATE: 9-4-87
S-1 3.0 -FILL- Fill- 6.8 S-2 6.9 Red Brown SILT, trace fine sand -FILL- Bottom of exploration at 7.0 ft Cobbles	IN	STRATA CHANGE	SAMPLE NUMBER	DEPTH		DESCRIPTION OF MATERIALS		REMARKS
- 10 -	_ 2 _	6.8		3.0	lit	-FILL- Brown SILT, trace fine sand		Propoposed Bottom of Footing El. 62 (3.8 ft. depth) El. 59.0 ft (see note) Observed to be
GROUNDWATER PIT DIMENSIONS TIME' DEPTH F1, 12.0 4.0 7.0 336 Cu. F1. BOULDERS GROUNDWATER Cr. F1. GROUNDWATER GROUNDWATER CR. F1. GROUNDWATER	- 10 - - 12 -			TER	6. To	Bottom of exploration at 7.0 ft evation of top of strata at a depth 8 ft in the test pit surveyed by wn of Glastonbury surveyors. $ \frac{12.0}{(L)} = \frac{4.0}{(W)} = \frac{7.0}{(D)} = \frac{336}{(D)} $ BOULDERS 8"10 18" DIAM No. 14 : Vol. 59	- Cu. Ft.	SUMMARY DEPTH 7.0 JAR SAMPLES 2 BAG SAMPLES -

H & A MAR. 7124

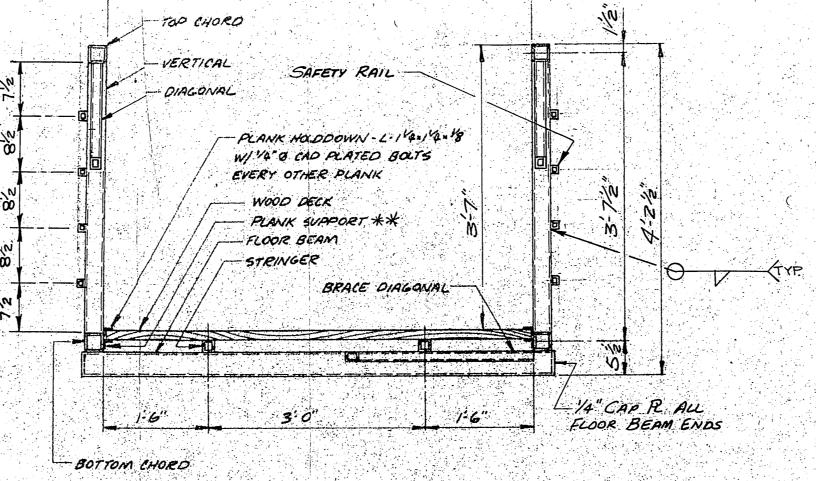
	ALEY &				TEST	PIT NO. TP 3
PRO.	JECT:_		HUB	BARD BROOK PEDESTRIAN BRIDGE		no. 9597
CLIE	NT:		TOW	N OF GLASTONBURY	WEST	ABUTMENT - SOUTH SIDE
			TOW	N OF GLASTONBURY	ELEV	ATION: 65.2 (SEE NOTE
	TRACT			00 PA 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EXPL	ORATION DATE: 9-4-87
	PMENT	USED:	JOH	N DEERE	INSPE	CTOR: C.G. HARRIMAN
SCALE IN FEET	STRATA CHANGE	SAMPLE NUMBER	SAMPLE DEPTH RANGE	DESCRIPTION OF MATERIALS		REMARKS
- 2 —				Brown to Red-Brown silty fine SAND, lit gravel, trace glass, concrete and aspha	tle It	Occasional cobbles
- 4 —		S-1	4.0	-FILL-		Proposed Bottom of Footing El. 62 (3.5 ft. depth)
8 -	5.7 6.0 6.7 7.0	S-3	5.8 6.4 6.9 7.2	Yellow-Brown silty fine SAND -FILL- Dark Brown silty fine SAND, trace wood -FILL- Red Brown medium to fine SAND, little grave trace coarse sand and siltFILL Red brown SILT, trace fine sand Bottom of exploration at 7.8 ft		E1.58.3 ft (see note) dry Observed to be hard
10 —				Note: Elevation of top of strata at a depth 7.0 ft in test pit surveyed by Town of Glastonbury surveyors.	n of of	
	GRO	UNDWA	TER	DIT DIMENSIONS		EULIU PY
DAT		TIME		PTH FT. 12.0 5.0 7.8 468		SUMMARY 7 O
	-		-	(L) × (W) (D)	Cu. Ft.	DEPTH 7.8 JAR SAMPLES 5
				BOULDERS 12 = Vol 50		BAG SAMPLES.
LOT 5:		nee 1 .	,	1 10 10 10	Cu. Ft.	GROUNDWATER
OI EN	COUNTE	RED X	1	COMPL Over 18" DIAM: No. 1 = Vol. 14	-u. Ff.	I LEST FIT NO. TP 3

H & A MAR. 71 24

ATTACHMENT B RECORD 1987 SHOP DRAWING FOR EXISTING PEDESTRIAN BRIDGE

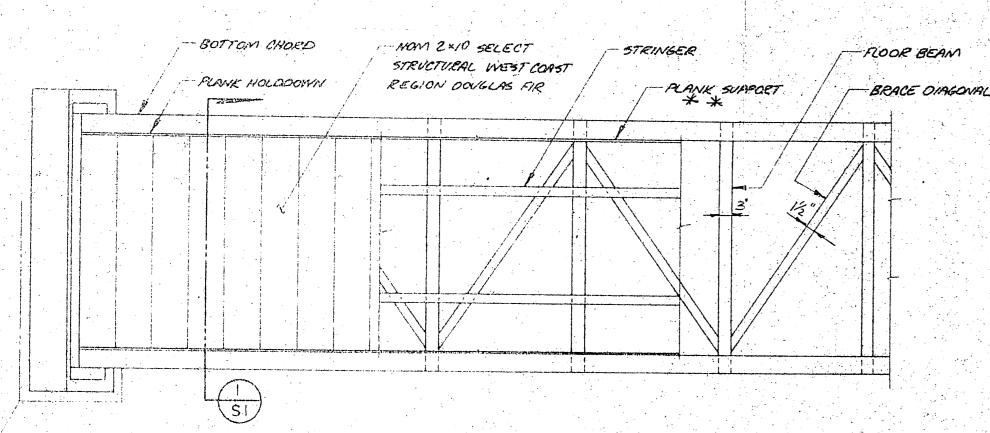


SHOP NOTE: SEAL ALL UN-WELDED SEAMS W SILICONE SEALANT



SCHEDULE OF	MEN	/BE	ER	Š	SIZ	ES
TOP CHORD	TS	4	×	3	×	1/8
BOTTOM CHORD	TS	4	*	3	×	1/8
VERTICAL	TS	4	*	3	*	1/8
DIAGONAL	-TS	2	×	2	×	18 *
BRACE DIAGONAL	TS	2	×	1/2	×	1/8
FLOOR BEAM	TS	4	X,	3	×	1/8
END FLOOR BEAM	TS ,	8	×	3	×	3/16
SAFETY RAIL	TS	:1	. ×	1.	×	1/8
PLANK HOLDDOWN	L	1/4	×	1/4	×	<i>Y8</i>
STRINGER	TS	2	×	2	×	1/8
PLANK SUPPORT	L	179	×	1/4	*	1/8

* Use TS 3 x 2 x Y8 END 3 BAYS, TYP BOTH ENDS



FRAMING LEVEL

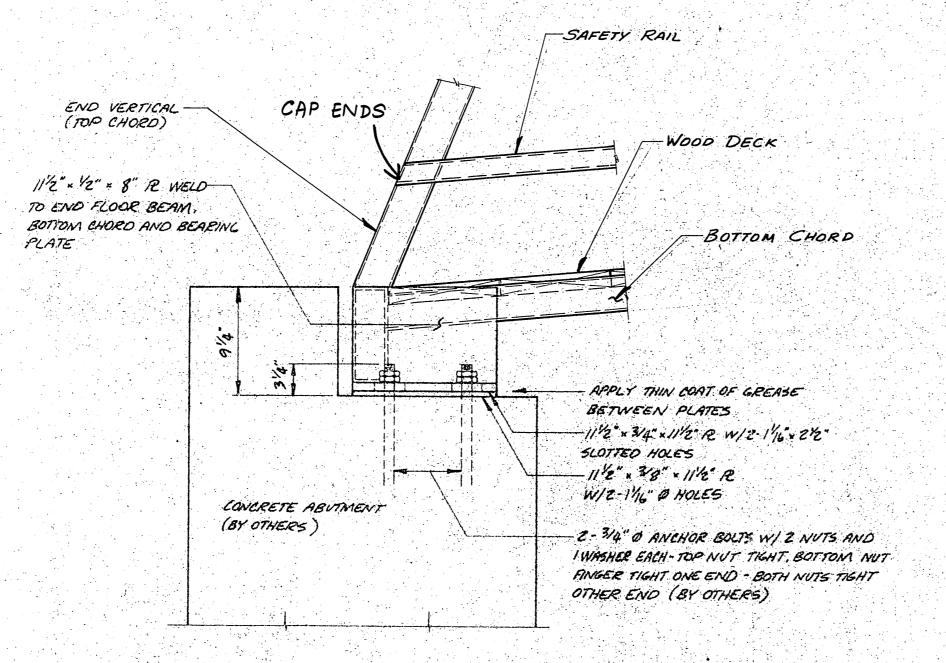
BRACING LEVEL

BRIDGE PLAN NO SCALE

(D) (D) - BOTTOM CHORD END FLOOR BEAM BRACE DIAGONAL TYP>--- (D) - (D) -WELD

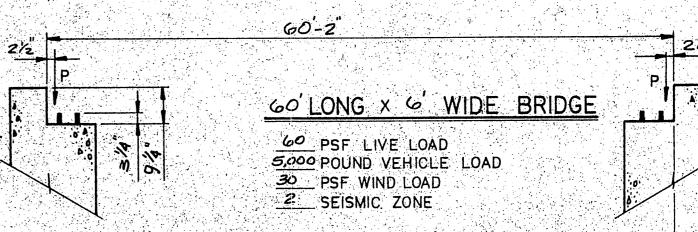
BRIDGE SPAN : 60-0"

PLAN - BEARING ASSEMBLY



SIDE VIEW-BEARING ASSEMBLY
SI SCALE: 11/2" = 1'-0"

SHOP DRAWING REVIEW-ACTION NO EXCEPTIONS TAKEN ... AMEND AS NOTED REJECTED RESUBMIT REVIEWED PURCELL ASSOCIATES DATE 10.29.87 BY LEP/NS GLASTONBURY, CONN. JOB NO.87-156



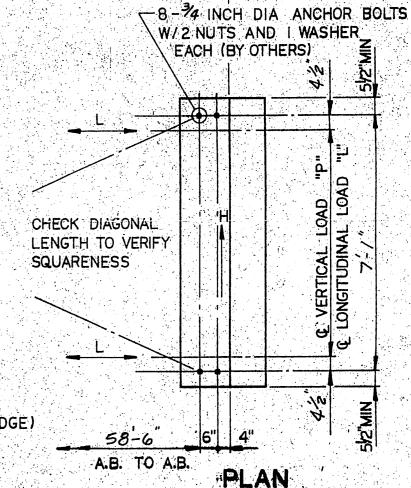
ANCHOR BOLT ELEVATION

COMBINE REACTIONS AS PER LOCAL OR GOVERNING BUILDING CODES AS REQUIRED

BRIDGE REACTIONS		DOWNWARD LOAD UPWARD LOAD	
,	P (LBS)	H(LBS)	L (LBS)
DEAD LOAD	1,750		
UNIFORM LIVE LOAD	5400		
VEHICLE LOAD PLUS 20 PSF LIVE LOAD	4300	4	
WIND UPLIFT 20 PSF	-3000		
WIND	+1,430	3800	
SEISMIC	± 70	210	210

"P" - VERTICAL LOAD EACH BASE PLATE (4 PER BRIDGE) "H" - HORIZONTAL LOAD EACH FOOTING (2 PER BRIDGE) "L" - LONGITUDINAL LOAD AT FIXED BEARING (2 PER BRIDGE)

BRIDGE LIFTING WEIGHT: 7,000 LBS



GENERAL NOTES

- DESIGN STRESSES ARE IN ACCORDANCE WITH THE (AISC).
- 2. ALL MATERIAL FABRICATED FROM HIGH STRENTH STEEL, ASTM A500 GRADE C (Fy = 50,000 PSI) AND ASTM A36 (Fy = 36,000 PST) STRUCTURAL STEEL SHAPES.
- BRIDGE DECKING NOMINAL 2 -INCH THICK SELECT STRUCTURAL WEST COAST REGION DOUGLAS FIR. TIMBER DECK MATERIAL SHALL BE TREATED WITH CHROMATED COPPER ARSENATE (CCA) TO A . 4 PCF RETENTION.
- 4. E80 SERIES ELECTRODES FOR WELDING.
- ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE WELDS. WELD BETWEEN TOP CHORD AND END VERTICAL SHALL BE PARTIAL PENETRATION.
- UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE LIGHTEST GAGE MEMBER IN THE CONNECTION. WELDS SHALL BE APPLIED AS FOLLOWS:
 - A) BOTH ENDS OF VERTICALS, DIAGONALS, AND FLOOR BEAMS SHALL BE WELDED ALL AROUND.
 - BRACE DIAGONALS WILL BE WELDED FOR FULL LENGTH OF TOP, BOTTOM AND OUTSIDE VERTICAL FACES. BOTTOM OF STRINGERS WILL BE STITCH WELDED TO
 - TOP OF FLOOR BEAMS. MISCELLANEOUS NON-STRUCTURAL MEMBERS WILL BE STITCH WELDED TO THEIR SUPPORTING MEMBERS
- BRIDGE DESIGN WAS ONLY BASED ON COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.
 - A) 60 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR 20 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA PLUS ONE 5,000 POUND VEHICLE
 - B) 30 PSF WIND LOAD ON THE FULL HEIGHT OF THE BRIDGE, AS IF ENCLOSED.
 - 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANSVERSE BRIDGE WIDTH (AASHTO 3.15.3).
- PAINTING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPARATION SPECIFICATIONS NO. 6 COMMERCIAL BLAST CLEANING, SSPC-SP6-63.

PRIMER COAT OF RETARDO RUST INHIBITIVE PRIMER 493 AEROSOL, RED #20, AS MANUFACTURED BY BENJAMIN MOORE

TWO (2) FINISH COATS OF CHEX-WEAR EPOXY-ESTER ENAMEL 226, BROWN #60, AS MANUFACTURED BY BENJAMIN MOORE

BRIDGE SHALL BE PROVIDED WITH PAINT FOR TOUCH-UP AFTER

RECEIVED

OCT 1 9 1987

DWN: DAP CHKO: DATE: 10/9/87

6

JOB NO.: 87188 51

drawing ho.

ATTACHMENT C RECORD 1988 SITE PLAN DEPICTING EXISTING PEDESTRIAN BRIDGE

