## BID REQUIREMENTS and CONDITIONS DOCUMENT

for

# HART STREET RECONSTRUCTION

New Britain, CT

PUBLIC BID NO. 3879 STATE PROJECT NO. 88-185 FEDERAL AID PROJECT NO. 1088(112)



## CITY OF NEW BRITAIN, CONNECTICUT

HONORABLE ERIN E. STEWART, MAYOR

## **FINAL DESIGN**

August 9, 2016

Prepared By:
City of New Britain
Public Works Department
27 West Main Street New Britain, CT
(860) 826-3350

## **BID REQUIREMENTS and CONDITIONS DOCUMENT**

## **TABLE OF CONTENTS**

	<u>Page</u>
Invitation for Bids	IFB-1/2
Instructions to Bidders	ITB-1/9
Contract - Form of Agreement/Contract Bonds	CON-1/13
Equal Opportunity Requirements	EOR-1/11
General Conditions	GC-1/33
Supplemental General Conditions	SGC-1/33
Calendar Day Chart	
Notice to Contractor/Special Provisions	
State Requirements	
Bid Proposal Submittal Package	

#### **INVITATION FOR BIDS**

The CITY OF NEW BRITAIN, acting through the City Purchasing Agent, will receive bids for **Hart Street Reconstruction**, **Bid No. 3879 until 11:00 AM on the 1<sup>st</sup> day of December, 2016**, at the Office of the Purchasing Department, Room 401 - City Hall, 27 West Main Street, New Britain, CT. 06051, at which time all bids will be publicly opened and read aloud.

The scope of work generally consists of roadway reconstruction along Hart Street from Corbin Avenue to Linwood Street and approx. 100 feet of Vine Street adjacent to Hart Street. Roadway reconstruction includes drainage improvement full depth reconstruction, sidewalk replacement, street trees and intersection realignment at Vine Street.

The Bid Documents and Plans may be downloaded from the City of New Britain web site at <a href="http://bids.newbritainct.gov">http://bids.newbritainct.gov</a> on or after 12:00 noon on the 7<sup>th</sup> day of November, 2016. A complete set of the Bid Documents and Plans are on file at the Office of the Purchasing Dept., Room 401 - City Hall, for review only.

The City reserves the right to accept or reject any or all bids or any part of a bid presented, or to invite proposals as its interest may appear.

A pre-bid conference shall be held on the 16<sup>th</sup> day of November, 2016, at 10:00 AM, in Room 504, City Hall, 27 West Main Street, New Britain, CT, and attendance is strongly recommended.

The City reserves the right to accept or reject any or all bids or any part of a bid presented, or to invite proposals as its interest may appear.

Attention is called to the fact that not less than the minimum salaries and wages as set forth in the Bid Documents must be paid on this project; proper classification of workers as employees rather than as independent contractors must be made. Where one or more apprentices are employed, Contractor must participate in a state-certified apprenticeship program. The Contractor must ensure that employees and applicants for employment are not discriminated against because of their race, sex, religions, color or national origin. The Contractor must adhere to all relevant provisions of Section 46a-95 of the Connecticut General Statutes, and any other relevant laws and regulations regarding Affirmative Action.

An "affidavit" of non-collusion shall be included in the Bid Documents, and must be completed by the prospective bidder and returned with the bid. Failure to return an executed non-collusion affidavit with a proposal may result in the subsequent rejection of subject bid. The Contractor shall comply with the Copeland Anti-Kickback Act and Regulations of the Secretary of Labor (29 CFR, Part 3).

The goal for Disadvantaged Business Enterprises (DBE) participation in this contract has been established at ten percent (10%) for construction and zero percent (0%) for construction inspection for this contract. Firms used to satisfy the contract DBE goal requirement must be on the Connecticut Department of Transportation list of certified DBE companies.

JACK PIEPER PURCHASING AGENT

#### **INSTRUCTIONS TO BIDDERS**

#### 1. RECEIPT AND OPENING OF BIDS

The <u>City of New Britain</u>, (herein called the "Owner"), invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner at the Office of the Purchasing Agent, located in Room 401, City Hall, 27 West Main St., New Britain, Connecticut 06051, until **11:00 AM on the 1st day of December, 2016**, and then at said office publicly opened and read aloud. The envelopes containing the bids must be sealed, addressed to the City of New Britain at the aforementioned address and designated as Bids for **Hart Street Reconstruction**, **Bid No. 3879**.

The Owner may consider informal any bid not prepared and submitted in accordance with provisions hereof and may waive any informalities in or reject any and all bids. 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.

#### 2. PREPARATION OF PROPOSAL

Proposals must be submitted on the prescribed forms included in the **Bid Proposal Submittal Package**, and any attachments as designated and necessary. All blank spaces must be filled in and all prompts answered. All responses shall be typewritten or hand printed in ink.

All bids must be completed on the **Form of Bid** included in the Bid Proposal Submittal Package, with the unit price for each item furnished in both words and figures, and the amount bid for each item furnished in figures. In addition, the total bid amount must be furnished in both words and figures. All prices and amounts shall be typewritten or hand printed in ink. The Bidder's attention is directed to the eleven (11) stipulations set forth in the said Form of Bid and agreed to by the Bidder with his submittal of a bid for the subject project. All bids shall be subject to all requirements of the Bid Documents, including the Specifications, Drawings, any referenced documents, and these Instructions to Bidders. All bids must be regular in every respect and no interlineation, excisions or special conditions shall be made or included in the Bid Forms by the bidder.

Each bidder's proposal, including, completed in full, the Form of Bid, the Statement of Bidder's Qualifications, the Notary certificate, Certification(s) Regarding Equal Employment Opportunity, Certification of Non-segregated facilities, Prospective Vendor's Residency and Tax Payment Certificate, the Bid Bond, Non Collusion Affidavit, Bid/Proposal Affidavit and , and any other specifications pages requiring vendor response shall be enclosed in envelopes (outer and inner), both of which shall be sealed and clearly labeled with the words "Bid Proposal", the bid number, the bidder's name, and the date and time of Bid Opening, in order to guard against premature opening of the Bid.

Once bids have been received, analyzed and an apparent low bidder has been identified, the following forms must be completed by the apparent low bidder and returned to the City of New Britain for approval:

- a) Contractor's Proposed Progress Chart
- b) Certificate of Compliance with Connecticut General Statute Section 31-57b
- c) Anticipated Source of Material, Form CON-83
- d) Certificate of Insurance, Form CON-32
- e) Disadvantaged Business Enterprise (DBE) Participation Approval Request
- f) Affirmative Action Program Certification

The Owner may consider as irregular any bid on which there is an alteration of or departure from the Bid Forms hereto attached and at its option may reject the same. The Owner reserves the right to reject any Bid submitted that is not in full compliance with these Instructions to Bidders as being not responsive. The Owner also reserves the right to reject the Bid of any Bidder it considers not responsible.

If the Contract is awarded, it will be awarded on the basis of the lowest bid and the selected Alternative and/or Optional Bid items, if any.

If forwarded by mail, the sealed envelope containing the proposal and marked as directed above, must be enclosed in another envelope addressed as specified in Article 1 of these Instructions to Bidders.

Erasures or other changes in the Bid Documents must be explained and noted over the signature of the Bidder.

#### 3. BID DOCUMENTS

The Bid Documents for the Project shall consist of the following:

- a) Bid Requirements and Conditions Document
- b) Bid Proposal Submittal Document
- c) Improvement Plans
- d) Special Technical Specifications
- e) New Britain Standard Specifications for Municipal Construction dated May 2008 (revised July 2014) available on the web under the Documents link at www.newbritainct.gov
- f) Connecticut Department of Transportation Form 816 including the latest Supplements dated January 2016

#### 4. QUALIFICATIONS OF BIDDER

The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any and all bids if evidence submitted by or investigation of such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

To assist the Owner in assessing the Bidder's ability to successfully perform the work, the Bidder shall complete in full the Statement of Bidder's Qualifications (pages SBQ-1 through SBQ-8) included in the Bid Proposal Submittal Package.

#### 5. DISQUALIFICATION OF BIDDERS

More than one proposal from an individual, partnership, firm or corporation, or any association under the same or different names, will not be considered. Reasonable ground for believing that any bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such bidder is interested. Any or all proposals will be rejected if there is reason for believing that collusion exists among bidders, and all participants in such collusion will not be considered in future proposals for the same work.

#### 6. BID SECURITY OR GUARANTY

Each bid must be accompanied by a bid bond or by a certified check of the bidder in the amount of TEN percent (10%) of the total bid amount, payable to the City of New Britain.

Such bonds or checks will be returned to all bidders, with the exception of the three lowest bidders, within three days after the formal opening of bids, and the remaining checks, or bid bonds, will be returned to the three lowest bidders within 48 hours after the Owner and the accepted bidder have executed the contract, or if no contract has been so executed, within 90 days after the date of opening of bids, or upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

The bid must also be accompanied by a letter from an approved bonding company satisfactory to the Owner stating that said bonding company will bond the Contractor for one hundred percent (100%) of his total bid amount, including any alternates, if said bidder shall be awarded the Contract for this project.

#### 7. POWER OF ATTORNEY

Attorneys in fact who sign bid bonds or contract bonds must file with each bond a certified copy of their power of attorney to sign said bonds.

#### 8. CONFLICT OF INTEREST

No member, officer, or employee of the OWNER, or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercises any function or responsibilities with respect to the program during the tenure, or for one year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds

thereof, under the agreement. The Grantee shall incorporate, or cause to be incorporated, in all such contracts or subcontracts a provision prohibiting such interest pursuant to the purposes of this article.

#### 9. CONDITIONS OF WORK

Each bidder is responsible to inform himself fully of the conditions relating to the construction and labor under which the work is to be performed. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions set forth in his bid. Insofar as possible, work shall be performed in such a manner as not to conflict with, or adversely affect other contractors or individuals routine performance of their duties, or otherwise affected by the work.

#### 10. OBLIGATION OF BIDDER AND INSPECTION OF SITE

Prior to bid submittal, it is the responsibility of each bidder to visit the project site and verify and become familiar with existing site conditions and other site attributes which may affect performance of the proposed work. It is also the bidder's responsibility to understand and be thoroughly familiar with the terms, obligations and requirements of the improvement plans, specification, and all other Bid Documents, and of all applicable City, State and Federal laws, codes, regulations, and requirements, and to make due allowance in his bid for all contingencies. Submittal of a Bid Proposal shall be considered conclusive evidence that the bidder has met these responsibilities. The failure or omission of any Bidder to receive or examine any form, instrument or documents shall in no way relieve any bidder from any obligation in respect to his bid.

If any omissions, errors, or other inconsistencies are noticed in the Bid Documents, it is the responsibility of the bidder to call them to the attention of Owner prior to bid submittal.

#### 11. ENFORCEMENT OF TERMS AND CONDITIONS

The bidders are notified that all terms and conditions of the Contract and these Bid Documents will be rigidly enforced.

#### 12. ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the plans, specifications or other Bid Documents will be made to any bidder orally. Every request for such interpretation should be made in writing addressed to the Owner, and, to be given consideration, must be received at least ten days prior to the scheduled bid opening. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the Bid Documents which, if issued, will be mailed by CERTIFIED mail with return receipt requested to all prospective bidders (at the respective addresses furnished for such purpose) not later than five days prior to the scheduled bid opening. Failure of any bidder to receive any such addendum or interpretation shall not relieve any bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Bid Documents.

#### 13. WITHDRAWAL OF BIDS

The following procedure shall apply for withdrawal of bids. A bidder may withdraw the bid by submitting either a written or facsimile request of withdrawal to the owner. The request of withdrawal <u>must</u> be received by the owner before the scheduled bid opening and may be made by mail, facsimile or hand-delivery. The bid guarantee of any bidder withdrawing the bid in compliance with this section shall be returned.

#### 14. REJECTION OF BIDS

- A. The Owner may reject a bid if:
  - 1. The bidder fails to furnish any of the information requested pursuant to Article 3A of these Instructions to Bidders;
  - 2. The submitted Bid does not strictly conform to law or the requirements of the Bid Documents;
    - 3. The submitted Bid is conditional or qualified;
  - 4. The submitted Bid is determined, in the opinion of the Owner, to be unbalanced. An unbalanced bid is defined as a bid containing a unit price or lump sum amount for any item which is deemed unreasonable when considering the item by itself and not in conjunction with the bid as a whole or any other item, or items, contained therein.
  - 5. The owner determines, by means of Article 3A of these Instructions to Bidders or any other appropriate means, the bidder to be not responsible, incompetent, or unqualified or incapable to perform the work specified.
- B. The Owner, however, reserves the right to reject any or all bids and to waive any informalities in a bid

#### 15. ACCEPTANCE AND AWARD OF CONTRACT

The Owner will accept one of the submitted bids on each contract, or will reject all bids on any or all contracts. Acceptance of the bid and Notice of Award will be in writing and signed the Owner or its designee, and mailed to the address designated in the successful bidder's proposal. The Notice shall contain information and instructions as to the time and place set for execution of the Contract. The successful bidder shall appear at the designated time and place to execute the Contract and furnish all bonds and certificates of insurance required.

#### 16. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The successful bidder shall execute and deliver the contract and required bonds within 10 days after he has received notice of the acceptance of his bid. Failure or refusal to do so shall cause the bidder to forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

#### 17. SECURITY FOR FAITHFUL PERFORMANCE

The bidder awarded the Contract shall, at the time of signing the Contract, submit an executed performance bond in the amount of 100% of the Contract amount conditioned upon the faithful performance of the Contract. Said performance bond shall be from a company or companies authorized to transact business in the State of Connecticut. The approved bonds shall also contain a labor and material bond for 100% of the Contract amount for the payment of all persons performing labor or furnishing materials in connection with this Contract.

#### 18. SUBCONTRACTING

The successful bidder may utilize the services of specialty subcontractors on those portions of the work which, under normal contracting practices are performed by specialty subcontractors. The successful bidder shall not award any portion of the work to a subcontractor without prior written approval of the Owner. The acceptance of any and all subcontractors shall reside with the Owner, and the Owner's decision shall be final. The successful bidder shall be fully responsible to the Owner for the performance, finished products, acts, and omissions of his subcontractors and persons directly or indirectly employed thereby.

The successful bidder shall cause appropriate provisions to be included in all subcontracts relative to this project to bind subcontractors to the provisions of the Contract and these Bid Documents as applicable to work performed by the subcontractor on this projects; and appropriate provisions to give the Owner the same powers and authority over any subcontractor as it has over the Contractor under the provisions of said documents.

#### 19. WAGES AND SALARIES

Attention of the bidders is particularly called to the requirements concerning the payment of not less than the prevailing wage and salary rates as set forth by the State and Federal (if applicable) wage rates included in this Bid Requirements and Conditions Document (see the Table of Contents for location within the document), and the conditions of employment with respect to certain categories and classifications of employees included therein.

The rates of pay set forth are the minimum to be paid during the life of the Contract. It is therefore the responsibility of the bidders to inform themselves as to local labor conditions, such as the length of work day and work week, overtime compensation, health and welfare contributions, labor supply and prospective changes or adjustments of rates.

#### 20. EQUAL EMPLOYMENT OPPORTUNITY

Attention of the bidders is called to the applicable State and Federal requirements for ensuring that employees and applicants for employment are not discriminated against because of their race, creed, color, or national origin.

#### 21. EXECUTIVE ORDER No. 17

To comply with the Governor's Executive Order No. 17, the Contractor and any subcontractors holding a contract directly under the Contractor shall list all employment openings with the Connecticut State Employment Service. The Labor Commissioner may allow exceptions to listing of employment openings which the Contractor proposed to fill from within its organization with employees on the rolls of the Contractor on the date of publication of the invitation to bid, or the date on which the public announcement was published or promulgated advising of the program concerned.

#### 22. LAWS AND REGULATIONS

The bidder's attention is directed to the fact that all applicable State and Municipal laws, rules, ordinances and regulations of all authorities having jurisdiction over construction work in the locality of the project shall apply to the contract throughout, and they are deemed to be included herein as if written out in full.

#### 23. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

See Contract and Form of Agreement.

#### 24. APPROVALS

The Contractor shall be responsible for obtaining all the necessary permits and approvals from the City of New Britain and the State of Connecticut, as required to complete the work in accordance with the improvement plans and other Contract Documents. The Owner will assist within its means in the approval process. However, any delays to the Contractor or the project, or any actions against either due to failure to obtain the necessary approvals, or to do so in a timely manner, or due to the Contractors lack of knowledge of the necessary approvals or the approval process, remain solely the responsibility of the Contractor.

#### 25. START OF CONSTRUCTION

The successful bidder agrees to commence construction within ten (10) calendar days after receipt of the Notice to Proceed from the Owner. The Notice to Proceed shall be sent by the Owner after execution and delivery of the Contract and required bonds in accordance with Article 7 of these Instructions to Bidders.

#### 26. REFERENCE SPECIFICATIONS

- A. The most recent edition of the "City of New Britain Standard Specifications for Municipal Construction" (also referred to as "Standard Specifications") is hereby made a part of these Bid Documents and the ensuing Contract by reference. Copies of the Standard Specifications are available for review and purchase from the New Britain Bureau of Engineering, or on the web under Documents link at www.newbritainct.gov.
- B. The State of Connecticut Department of Transportation "Standard Specifications for Roads, Bridges and Incidental Construction, Form 816" with January 2016 Supplemental Specifications, (also referred to as "Form 816"), is hereby made a part of these Bid Documents and the ensuing Contract by reference. Copies of Form 816 are available for purchase from the D.O.T., and copies are available for review at the New Britain Bureau of Engineering.

#### 27. CONFLICTING PROVISIONS

In the event of conflicts or inconsistencies between separate provisions of these Bid Documents and/or the executed Contract, such conflicts shall be resolved by applying the following in decreasing order of precedence:

Contractual Matters	Technical Matters
1) Contract-Form of Agreement	1) Special Technical Specifications
2) Invitation to Bid	2) Contract Drawings
3) Instructions to Bidders	3) Reference Specifications
4) Special Provisions	
5) Supplemental General Conditions	
6) General Conditions	

#### 28. SAFETY AND HEALTH REGULATIONS

These construction documents, and the joint and several phases of construction hereby contemplated are to be governed at all times, by applicable provisions of the federal law(s), including but not limited to, the latest amendments of the following:

- (1) William-Steiger Occupational Safety and Health Act of 1970, Public Law 91-956;
- (2) Part 1910 Occupational Safety and Health Standards, Chapter SVII of Title 29, Code of Federal Regulations;
- (3) Part 1926 (formerly Part 1518) Safety and Health Regulations for Construction, Chapter XIII of Title 29, Code of Federal Regulations.

In the event of any inconsistencies between the above laws and regulations and the provisions of these documents, the laws and regulations shall prevail.

#### 29. SALES TAX

The Owner is exempt from Connecticut State Sales and Use Taxes on materials and equipment to be incorporated in this work. The Contractor may purchase materials or supplies to be consumed in the performance of this contract without payment of tax and shall not include taxes in his Contract Price.

#### 30. SOURCE OF MATERIALS

Bid Proposal Submittal Document shall be completed in full by the apparent low bidder and submitted to the Engineer prior to Award of the Contract.

#### 31. METHOD OF AWARD - Lowest Responsible Bidder

Bids will be compared on the basis of the total sum of the unit price submitted by the bidder for each base bid item applied to the estimated quantity designated in the bid form for that item, plus the amounts of any base bid lump sum items, plus any adjustments due to Options or Alternates selected by the City. Award will be made to the lowest responsible bidder, who shall be determined in accordance with and pursuant to Section 2-578 Items 1 through 12, inclusive, of the City of New Britain Code of Ordinances.

#### FORM OF AGREEMENT BETWEEN THE CONTRACTOR AND OWNER

	THI	S AGREE	MENT,	made t	he _		day	of					
in	the ye	ear <b>TWO</b>	THOUS	AND ANI	siz	XTEEN	by	and	betwe	en Tl	HE CITY	OF	NEW
BR:	ITAIN,	herein	after	called	the	"OWN	ER"	and	xxx,	Inc,	locate	ed ir	xx,
xx	, here:	inafter	calle	d the '	'CON	TRACTO	OR".	,					

#### WITNESSETH:

WHEREAS, the City is desirous of entering into a contract for the Hart Street Reconstruction, in the City of New Britain Connecticut,

WHEREAS, the Contractor has entered a bid price and is adjudged the successful bidder, for the Hart Street Reconstruction in the City of New Britain, Connecticut.

WITNESSETH THAT, the Contractor and the Owner for the considerations hereinafter named agree as follows:

Article 1. SCOPE OF WORK-- The Contractor shall furnish all of the materials and perform all of the work shown on the drawings and described in the specifications prepared by the City of New Britain as and in these Contract Documents entitled: Hart Street Reconstruction, Bid No. 3879, and shall do everything required by the Contract Documents as designated in Article 3 of this Agreement. The Contractor agrees to obtain the required permits from the State of Connecticut for this project.

The Contractor shall protect all work done by them until completion and acceptance of the work by the City. The Contractor is also responsible and liable for and shall exercise proper precaution at all times to protect and care of property, motoring public and pedestrians from harm or injury at the project site.

The Contractor upon completion of all work shall remove all materials, equipment and rubbish and shall leave the City Streets and the area near the project in a neat and orderly condition.

Article 2. THE CONTRACT PRICE-- The Owner will pay the Contractor for the performance of the Contract in current funds, for the Hart Street Reconstruction Project, Bid No 3879 at the unit prices stipulated in the Bid for the respective items of work completed subject to additions and deductions as provided in the Section entitled "Changes in the Work" under the General Conditions."

Article 3. CONTRACT-- The executed contract documents shall consist
of the following:

1.	~ 1 1	
b.	Addenda	thereto:

No.	date	No.	date	No.	date

- c. Bid Requirements and Conditions Document
- d. Bid Proposal Submittal Document, as submitted by Contractor
- e. Improvement Plans
- f. Other Contract Drawings issued
- g. Special Technical Specifications
- h. New Britain Standard Specifications for Municipal Construction
- i. Connecticut Department of Transportation Form 816 and Supplement dated January 2016

This Agreement, together with the other documents enumerated in this Article 3 and other documents, which are made part hereof by reference, forms the Contract between the parties hereto.

The Contractor and the Owner for themselves, their successors, executors and administrators and assigns hereby agree to the full performance of the covenants herein contained.

The specifications, conditions and the bid terms of Bid 3879 are attached hereto, incorporated by reference and made a part of this agreement.

Article 4. NOTICE TO PROCEED, TIME OF COMPLETION, AND LIQUIDATED DAMAGES: -- The Contractor shall agree to commence work within ten (10) calendar days after receipt of the "Notice to Proceed" from the Owner. Such Notice may be sent after execution of this Agreement (also referred to herein as the "Contract").

The Contractor shall agree to complete the work within 336 days from receipt of the Notice to Proceed. The date of completion shall be known as the "Date of Substantial Completion" when all construction is sufficiently complete in accordance with the Contract Documents, so the owner can occupy or utilize the work or designated portion thereof for the use which it is intended, and the work is properly finished to provide the appearance intended, and the Certificate of Completion is issued by the Owner to the Contractor.

The Contractor shall prosecute the work continuously until completion. The rate of progress for any given Phase shall be at least that shown on the "Schedule of Progress" which is to be submitted to the Engineer by the Contractor in a form satisfactory to the Engineer prior to execution of this Agreement.

In general, work shall be prosecuted continuously throughout the term of the Contract, not including the winter season. The Contractor will be expected to keep work going whenever possible. The Engineer will determine when conditions are unfavorable for work, or for any portion thereof, and may order that work be suspended on any part or

all portions of the Contract whenever, in his opinion, the conditions are not such as will insure first class work.

The Contractor shall further agree that the Date of Completion of the Project Work is a reasonable time for completion of the work contemplated in accordance with the Improvement Plans, Specifications, and other Contract Documents, taking into consideration average weather conditions, availability of labor and delivery of materials and equipment.

If the Contractor neglects, fails or refuses to substantially complete the Project Work within the Time of Completion as specified herein, or any proper extension granted thereto by the Owner in accordance with the General Conditions, then the Contractor shall agree, as part consideration for the award of this Contract, to pay to the Owner a liquidated damage for breach of contract for **each and every calendar day** that the Contractor shall be in default on the subject Phase. This is not to be construed in any sense as a penalty.

Where actual damages for any delay in substantial completion of a Phase are impossible to determine by reason of the Owner's election not to terminate the right of the Contractor to proceed, the Contractor and his sureties shall be liable for, and shall pay to the Owner, the sum of \*Two Thousand Six Hundred Dollars (\$2,600.00), as fixed, agreed, and liquidated damages for each calendar day of such delay until the work is substantially completed and accepted.

The Owner, however, may accept the work if there has been such a degree of completion as will, in the Owner's opinion, make the project reasonably safe, fit, and convenient for the use and accommodation for which it was intended. In such case, the Contractor shall not be charged with liquidated damages, but the Owner may assess the actual damages by such delay.

Article 5. GUARANTEE: -- The Contractor guarantees the work done under this contract and the materials furnished by him and used in the work are free from defects, and the guarantee is for a term of one year from and after the date of the Certificate of Project Completion. It is agreed and understood that the Contractor will at any time during this one year period, upon notification in writing from the Engineer, and without expense to the Owner, immediately execute all repairs which may be necessitated, as determined by the Engineer, by reason of any defective materials used therein, or by defective workmanship, or by reason of the normal use or functioning of all facilities constructed under this contract.

The Owner reserves the right to retain up to five percent (5%) of the Total Contract Price, or to accept, at the Owner's option, a Guarantee Bond for up to five percent (5%) of the Total Contract Price, and to hold such retainage or bond for the duration of the guarantee period. Upon expiration of the guarantee period, provided that all work is in good order, the Contractor shall be entitled to receive said retainage or, if posted, the release of the Guarantee Bond.

The Contractor must provide to the Owner at the time of signing this contract Performance and Material Bonds for this project.

Article 6. PREVAILING WAGE RATES: Prevailing Wage Rates do apply for this project. The Contractor will submit weekly a copy of all payrolls to the Owner. The copy shall be accompanied by a statement signed by the Owner or his agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Connecticut Department of Labor and that of the Owner's prevailing wage rates for this project in accordance with the specifications, conditions, and bid terms of Bid #3879.

Article 7. INSURANCE COVERAGE: The Contractor shall agree to maintain in force at all times during which services are to be performed the following coverages placed with company(ies) licensed by the State of Connecticut which have at least an "A-VIII" policyholders' rating according to BEST Publications latest edition Key Rating Guide:

Commercial General Liability:	General Aggregate	\$4,000,000
-	Prod./Compl.	
	Operations	
	Aggregate	\$2,000,000
	Occ. Aggregate	\$2,000,000
Automobile	Liability Limit	\$2,000,000
Liability:		
Umbrella	Each Occurrence	\$2,000,000
(Excess Liability)	Aggregate	\$4,000,000
Workers' Comp. And	WC Statutory Limits	
Employer's	EL Each Accident	\$500,000
Liability:		
	EL Disease Each	\$500,000
	Employee	
	EL Disease Policy	\$500,000
	Limit	
Owner's & Contractor's	Each Occurrence	\$ 1,000,000
Protective Liability	Aggregate	\$ 1,000,000

The City of New Britain and Consolidated School District" and "State of Connecticut" shall be named as "Additional Insured", and the Contractor agrees to provide replacement/renewal certificate at least 60 days prior to the expiration of the policy. Should any of the described policies be cancelled before the expiration date, written notice must be made to the City 30 days prior to cancellation.

The Contractor agrees to provide a certificate of insurance at the time of the execution of this contract as was as a replacement/renewal certificate at least 60 days prior to the expiration of the policy. Should any of the above-described policies be cancelled before the expiration date, written notice must be made to the City 30 days prior to cancellation. The Contractor agrees to name the City as additional

insured on all insurance policies, except Workers Compensation and to provide a Waiver of Subrogation on all policies.

If any policy is written on a "Claims Made" basis, the policy must be continually renewed for a minimum of two (2) years from the completion date of this contract. If the policy is replaced and/or the retroactive date changed, then the expiring policy must be endorsed to extend the reporting period for claims for the policy in effect during the contract for two (2) years from the completion date.

Contractor covenants and agrees to hold the City harmless and to indemnify the City from (I) any and all claims arising from the performance of service enumerated herein, or any work or thing whatsoever done, or any condition created (other than by the City)during the term of this contract or any extensions thereof, but only to the extent caused by the negligent or otherwise wrongful act or omission of Contractor, its agent, employees, contractors or licensees and (II) all costs, expenses, liabilities incurred in or in connection with each such claim or action or proceeding brought thereon. In case an action or proceeding be brought against the City by reason of any such claim, Contractor, upon notice from the City, shall resist and defend such action claim or proceeding.

Article 8. HOLD HARMLESS AGREEMENT: -- The Contractor, its agents and assigns shall indemnify and hold harmless the State of Connecticut and City of New Britain, including but not limited to, its elected officials, its officers, and agents, ("the City") from any and all claims made against the City, including but not limited to, damages, awards, costs and reasonable attorneys fees, to the extent any such claim directly and proximately results from the wrongful willful or negligent performance of services by the Contractor during the Contractor's performance of this Agreement or any other Agreements of the Contractor entered into by reason thereof. The City agrees to give the Contractor prompt notice of any such claim and absent a conflict of interest, an opportunity to control the defense thereof.

This Agreement shall be binding on and inure to the benefit of the parties hereto and to their respective successors and assigns.

Article 9. Any reference to this Agreement shall be by number. The number assigned to this Agreement shall be #3879.

#### Article 10. Retention of Records and Records Accessibility:

10.1 All services performed by Grantee shall be subject to the inspection and approval of the City, CTDOT, or Federal Highway Administration (FHWA) at all times, and Grantee shall furnish all information concerning the services. CTDOT or its representatives shall have the right, at reasonable hours, to inspect or examine the part of the plant or place of business or any books, records, and other documents of Grantee or its subcontractors or sub grantees pertaining to work performed under this agreement and shall allow such representatives free access to any and all such plants, places of business, books and records. DOT or its representatives will give the Grantee or its subcontractors or sub grantees at least twenty-four

- (24) hours' notice of such intended examination. At DOT's request, the Grantee or subcontractors or sub grantees shall provide DOT with hard copies or an electronic format of any data or information in the possession or control of the Grantee, subcontractor or sub grantee which pertains to DOT's business under this agreement.
- 10.2 The Grantee shall retain and maintain accurate records and documents relating to performance of services under this agreement for a minimum of three (3) years starting from the date of submission of the final expenditure report with the following qualifications and shall make them available for inspection and audit by DOT or its representative:
  - a. If any litigation, claim or audit is started before the expiration date of the three-year period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved; and
  - b. Records for the purchase of equipment (i.e., non-expendable, tangible personal property) acquired with grant funds shall be retained for three years after the final disposition of said property.
- 10.3 Any subcontractor or sub grantee under this agreement shall retain and maintain accurate records and documents relating to performance of services under this agreement for a minimum of three (3) years from the expiration of the subcontract or sub grant and shall make them available for inspection and audit by DOT or its representative.
- 10.4 The Grantee must incorporate this paragraph verbatim into any agreement it enters into with any subcontractor or subgrantee providing services under this agreement. providing services under this agreement.

This Agreement was entered into pursuant to approval of the City of New Britain's Common Council, on,
Resolution No and approved by the Mayor.
IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date first above written.
OWNER: CITY OF NEW BRITAIN
BY:
Purchasing Agent
WITNESS:
Signed in the presence of:
CONTRACTOR: XXXX, Inc,
CONTRACTOR. AAAA, IIIC,
BY:
WITNESS:
Signed in the presence of:
STATE OF ss: 201 <b>x</b>
COUNTY OF
Personally appeared who acknowledged the signing of this to be his free act and deed.
Notary
Commissioner of Superior Court Justice of the Peace
WITNESS:  Signed in the presence of:

## ACKNOWLEDGMENT OF PRINCIPAL, (IF A CORPORATION) COUNTY OF On this $\_$ day of $\_$ , $\_$ , before me, personally came and appeared \_\_\_\_\_\_ to me known, who, being by me duly sworn, did depose and say that he is the \_\_ of corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation: that one of the impressions affixed to said instrument is an impression of such seal: that it was so affixed by order of the director of said corporation, and that he signed his name thereto by like order. SEAL ACKNOWLEDGMENT OF PRINCIPAL, (IF A PARTNERSHIP) COUNTY OF \_\_\_\_\_) On this \_\_\_\_\_ day of \_\_\_\_\_\_, before me, personally \_\_\_\_\_ to me known and known came and appeared to me to be one of the members of the firm of described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm. SEAL ACKNOWLEDGMENT OF PRINCIPAL, (IF AN INDIVIDUAL) STATE OF \_\_\_\_\_) ss. COUNTY OF ) On this \_\_\_\_ day of \_\_\_\_, \_\_\_, before me, personally came and appeared \_\_\_\_ to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same.

SEAL

#### CERTIFICATE OF CONTRACTOR'S ATTORNEY

I, the undersign	ned	the	e duly
authorized and acting	legal representat	cive of	
	, do her	ceby certify as fo	llows:
I have examined manner of execution to aforesaid agreements thereto acting through said representatives agreements on behalf the foregoing agreements obligations upon the terms, conditions and	will be duly execut h their duly author have full power are of the respective ents constitute val parties executing	of the opinion that the description of the proper orized representated authority to ex- parties name ther id and legally bithe same in accor-	t each of the parties ives. That ecute said eon and that nding
BY:Attorney-in-fa			
Law Firm:			
Address - Zip Code:			
Date:			

#### PERFORMANCE PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: That we
a,
a, Contractor) a, (Corporation, Partnership or Individual)
hereinafter called "PRINCIPAL" and(Surety)
of, State of
hereinafter called the "SURETY", are held and firmly bound unto $\underline{ ext{CITY}}$
OF NEW BRITAIN, hereinafter called "OWNER" in the penal sum of
Dollars (\$) in lawful money of
the United States, for the payment of which sum well and truly to be
made we bind ourselves, our heirs, executors, administrators and
successors jointly and severally, firmly by these presents.
THE CONDITION OF THIS OF THIS OBLIGATION is such that Whereas the Principal entered into a certain contract with the Owner, dated the day of,, copy of which is hereto attached and made a part hereof for the construction of the

# HART STREET RECONSTRUCTION Bid No. 3879

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under such contract and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, and shall promptly make payment to all persons, firms subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

Provided, further, that the said Surety, for value received, hereby stipulates and agrees that no charge, extension of time, alteration or addition to the terms of the contract or to the work to be performed

thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extensions of time alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

	shall	ent is executed in three (3) be deemed an original, this the
ATTEST:		
(Principal) Secretary (SEAL)		BY:
Witness as to Principal		
(Address - Zip Code)		
ATTEST:		
(Surety) Secretary	BY:	Attorney-in-fact
		_(Address-Zip Code)
Witness as to Surety	<del></del> (Addr	NOTE: Date of Bond must not be prior to date of Contract. If a Partnership, all partners should execute the bond. ess-Zip Code)

BOND NO.

#### LABOR AND MATERIAL PAYMENT BOND

Note: This bond is issued simultaneously with another Bond in favor of the Owner conditioned for the full and faithful performance of the Contract. KNOW ALL MEN BY THESE PRESENTS: as Principal (hereinafter called Principal) and as surety (hereinafter called Surety) are held and firmly bound unto THE CITY OF NEW BRITAIN as Obligee (hereinafter called Owner) for the use and benefit of claimants as

hereinbelow defined; in the amount of

for	the	payment	whereof	Principal	and	Surety	bind	themselve	s, the	ir
heii	ſS,	executors	s, admini	istrators,	succ	cessors	, and	assigns,	jointly	z and

Dollars (\$ ),

severally, firmly by these presents.

WHEREAS, principal has written agreement dated \_\_\_\_, entered into a Contract with Owner for the construction of

#### HART STREET RECONSTRUCTION Bid No. 3879

which Contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that, if the said Principal shall promptly pay for all materials furnished the said Principal shall promptly pay for all materials furnished and labor supplied or performed in the prosecution of the work included in and under the aforesaid Contract, whether or not the material or labor enters into and becomes a component part of the real asset, then this obligation shall be null and void otherwise it shall remain and be in full force and effect.

PROVIDED, that any alterations which may be made in the terms of the Contract or in the work to be done under it, or the giving by the Obligee of any extension of time for the performance of the Contract, or any other forbearance on the part of either the Obligee or the Principal to the other shall not in any way release the Principal and the Surety or either or any of them, their heirs, executors, administrators, successors or assigns from their liability hereunder,

notice to the surety of any such alterations, extension or forbearance being hereby waived.

Any party, whether a subcontractor or otherwise, who furnished materials or supplies or performs labor or services in the prosecution of the work under said Contract, and who is not paid therefor, may bring a suit on this bond in the name of the person suing, prosecute the same to a final judgment, and have execution thereon for such sum as may be justly due.

instrument under their several s	al of each corporation partly being signed by its undersigned	,
In the presence of:		
		(SEAL)
	(Individual Principal)	
		(SEAL)
Attest: BY:		
	BY:	
ATTEST:	Affix Corporate Seal	
	BY: Affix Corporate Seal	
Countersigned		
by		
*Attorney-in-Fact, State of		

\*Power-of-Attorney for person signing for Surety Company must be

attached to Bond.

# STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATION EXECUTIVE ORDER 11246

- 1. The offertory's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Females	Minorities
6.9%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Specific Affirmative Action Obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

### **EQUAL OPPORTUNITY REQUIREMENTS**

(State)

New Britain,	Hartford	Connecticut

(County)

As used in this Notice, and in the contract resulting from this solicitation, the

4.

"covered area" is

(City)

#### ATTACHMENT B

The applicant agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereto, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay, or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers representative of the contractors' commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes to ascertain compliance with such rules, regulations and orders.

- (6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further government construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance: Provided however, that in the event a contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the City to enter into such litigation to protect the interests of the City.

The Contractor is further instructed that any prohibition against discrimination on the basis of age under the Age Discrimination Act of 1975 or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973 shall also apply to this contract.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in construction work: Provided that if the applicant so participating is a State or local government the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibilities for securing compliance.

#### **EQUAL OPPORTUNITY REQUIREMENTS**

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee): refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

#### ATTACHMENT C

Standard Federal Equal Employment Opportunity Construction Specifications (Executive Order 11246)

- 1. As used in these specifications:
- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted:
- b. "Director" means director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
- c. "Employer identification number" means the Federal Social Security number used on the Employers Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
  - d. "Minority" includes:
    - 1. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
    - Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);
    - 4. American Indian or Alaskan Native; (all persons having origins in any of the original peoples of North America and Maintaining identifiable tribal affiliations through membership and participation or community identification).
    - 5. Portuguese (all persons of Portuguese, Brazilian or other Portuguese culture or origin regardless of race).
- 2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which the contract resulted.

- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clauses, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to make good faith efforts to achieve the plan goals and timetables.
- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contract should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward the goals in each craft during the period specified.
- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with

specific attention to minority or female individuals working at such sites or in such facilities.

- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunity and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc. by specific review of the policy with all management personnel and with all minority and female employees at least once a year, and by posting the company EEO policy on bulletin board accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these terms with on site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with contractors and Subcontractors with whom the Contractor anticipates doing business.
- I. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- I. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontract from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor union, contractor community, or other similar

group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participated in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work-force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's non-compliance.

- 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contract may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under utilized.
- 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, of these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address,

### **EQUAL OPPORTUNITY REQUIREMENTS**

telephone numbers, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

# **GENERAL CONDITIONS**

# City of New Britain

# **General Conditions**

# Contents\*

1.	Contract and Contract Documents	24.	Construction Schedule and Periodic Estimates
2.	Definitions	25.	Payments to Contractor
3.	Additional Instructions and Detail Drawings	26.	Acceptance of Final Payment Constitutes Release
4.	Shop or Setting Drawings	27.	Payments by Contractor
5.	Materials, Services, and Facilities	28.	Insurance
6.	Contractor's Title to Materials	29.	Contract Security Documents
7.	Inspection and Testing of Materials	30.	Additional or Substitute Bond
8.	"Or Equal" Clause	31.	Assignments
9.	Patents	32.	Mutual Responsibility of Contractors
10.	Surveys, Permits and Regulations	33.	Separate Contract
11.	Contractor's Obligations	34.	Subcontracting
12.	Weather Conditions	35.	Architect/Engineer's Authority
13.	Protection of Work and Property- Emergency	36.	Stated Allowances
14.	Inspection	37.	Use of Premises and Removal of Debris
15.	Reports, Records, and Data	38.	Quantities of Estimate
16.	Superintendence by Contractor	39.	Lands and Rights of Way
17.	Changes	40.	General Guaranty
18.	Disputes		
19.	Arbitration and Litigation	41.	Notice and Service Thereof
20.	Time for Completion and Liquidated Damages	42.	Provisions Required By Law Deemed Inserted
21.	Correction of Work	43.	Protection of Lives and Health
22.	Subsurface Conditions Found Different	44.	Subcontracts
23.	Right of Owner to Terminate Contract	45.	Equal Employment Opportunity

### **GENERAL CONDITIONS**

46.	Interest of Members of or Delegates to
	Congress

- 47. Other Prohibited Interest
- 48. Use and Occupancy Prior to Owner's Acceptance
- 49. Photographs
- 50. Suspension of Work
- 51. Minimum Wages
- 52. Withholding of Payments
- 53. Payrolls and Basic Records
- 54. Apprentices
- 55. Compliance with Copeland Anti-Kickback Act and Regulations
- 56. Overtime
- 57. Signs
- 58. Employment Practices
- 59. Contract Termination; Debarment
- 60. Termination for Convenience of the Owner
- 61 Ordinance Compliance

<sup>\*</sup>See alphabetical index at end

### 1. Contract and Contract Documents

The Plans, Specifications and Addenda, hereinafter enumerated in Paragraph 1 of the Supplemental General Conditions, shall form part of this Contract; and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal notes contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way affect, limit or cast light on the interpretation of the provisions to which they refer.

### 2. Definitions

The following terms as used in this contract are respectively defined as follows:

- (a) "Contractor": A person, firm or corporation with whom the contract is made by the Owner.
- (b) "Subcontractor": A person, firm or corporation supplying labor and materials or only labor for work at the site of the project for, and under separate contract or agreement with, the Contractor.
- (c) "Work on (at) the project": Work to be performed at the location of the project including the transportation of materials and supplies to or from the location of the project, by employees of the Contractor and any Subcontractor.

### 3. Additional Instructions and Detail Drawings

The Contractor will be furnished additional instructions and detail drawings as necessary to carry out the work included in the contract. The additional drawings and instructions thus supplied to the Contractor will coordinate with the Contract Documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions. The Contractor and the Architect/Engineer will prepare jointly (a) a schedule, fixing the dates at which special detail drawings will be required, such drawings, if any, to be furnished by the Architect/Engineer in accordance with said schedule, and (b) a schedule fixing the respective dates for the submission of shop drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment, and the completion of the various parts of the work; each such schedule to be subject to change from time to time in accordance with the progress of the work.

### 4. Shop or Setting Drawings

The Contractor shall submit promptly to the Architect/Engineer two copies of each shop or setting drawing prepared in accordance with the schedule predetermined as aforesaid. After examination of such drawings by the Architect/Engineer and the return thereof, the Contractor shall make such corrections to the drawings as have been indicated and shall furnish the Architect/Engineer with two corrected copies. If requested by the Architect/Engineer the Contractor must furnish additional copies. Regardless of corrections made in or approval given to such drawings by the Architect/Engineer, the Contractor will nevertheless be responsible for the accuracy of such drawings and for their conformity to the Plans and Specifications, unless he notifies the Architect/Engineer in writing of any deviations at the time he furnishes such drawings.

### 5. Materials, Services, and Facilities

- (a) It is understood that except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all material, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.
- (b) Any work necessary to be performed after regular working hours, on Sundays or Legal Holidays, shall be performed without additional expense to the Owner.

### 6. Contractor's Title to Materials

No materials or supplies for the work shall be purchased by the Contractor or by any Sub-contractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies used by him in the work, free from all liens, claims or encumbrances.

## 7. Inspection and Testing of Materials

- (a) All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. The Owner will pay for all laboratory inspection service direct, and not as part of the contract.
- (b) Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.

## 8. "Or Equal" Clause

Whenever a material, article or piece of equipment is identified on the plans or in the specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard; and, any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable, provided the material, article, or equipment so proposed, is, in the opinion of the Architect/Engineer, of equal substance and function. It shall not be purchased or installed by the contractor without the Architect/Engineer's written approval.

#### 9. Patents

- (a) The Contractor shall hold and save the Owner and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract Documents.
- (b) License or Royalty Fees: License and/or Royalty Fees for the use of a process which is authorized by the Owner of the project must be reasonable, and paid to the holder of the patent, or his authorized licensee, direct by the Owner and not by or through the Contractor.
- (c) If the contractor uses any design, devise or materials covered by letters, patent, or copyright, he shall provide for such use by suitable agreement with the Owner of such patented or copyrighted design, devise or materials, it is mutually agreed and understood that, without exception, the contract prices shall include all royalties or cost arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or his Sureties shall indemnify and save harmless the Owner of the project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract, and shall indemnify the Owner for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

### 10. Surveys, Permits, and Regulations

Unless otherwise expressly provided for in the Specifications, the Owner will furnish to the Contractor all surveys necessary for the execution of the work.

The Contractor shall procure and pay all permits, licenses and approvals necessary for the execution of his contract.

The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to performance of the work, the protection of adjacent property, and the maintenance of passage- ways, guard fences or other protective facilities.

### 11. Contractor's Obligations

The Contractor shall and will, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract, within the time herein specified, in accordance with the provisions of this contract and said specifications and in accordance with the plans and drawings covered by this contract any and all supplemental plans and drawings, and in accordance with the directions of the Architect/Engineer as given from time to time during the progress of the work. He shall furnish, erect, maintain, and remove such construction plant and such temporary works as may be required.

The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the contract and specifications, and shall do, carry on, and complete the entire work to the satisfaction of the Architect/Engineer and the Owner.

### 12. Weather Conditions

In the event of temporary suspension of work, or during inclement weather, or whenever the Architect/Engineer shall direct, the Contractor will, and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Architect/ Engineer, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his Subcontractors so to protect his work, such materials shall be removed and replaced at the expense of the Contractor.

### 13. Protection of Work and Property--Emergency

The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work, and that of adjacent property from damage. The Contractor shall replace or make good any such damage, loss or injury unless such be caused directly by errors contained in the contract or by the Owner, or his duly authorized representatives.

In case of an emergency which threatens loss or injury of property, and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Architect/Engineer, in a diligent manner. He shall notify the Architect/Engineer immediately thereafter. Any claim for compensation by the Contractor due to

such extra work shall be promptly submitted to the Architect/Engineer for approval.

Where the Contractor has not taken action but has notified the Architect/Engineer of an emergency threatening injury to persons or damage to the work or any adjoining property, he shall act as instructed or authorized by the Architect/Engineer.

The amount of reimbursement claimed by the Contractor on account of any emergency action shall be determined in the manner provided in Paragraph 17 of the General Conditions.

### 14. Inspection

The authorized representatives of the Federal Highway Administration, the State of Connecticut, and the City of New Britain and its agents shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.

### 15. Reports, Records and Data

The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the Owner may request concerning work performed or to be performed under this contract.

### 16. Superintendence by Contractor

At the site of the work the Contractor shall employ a construction superintendent or foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Architect/Engineer and shall be one who can be continued in that capacity for the particular job involved unless he ceases to be on the Contractor's payroll.

# 17. Changes (48 CFR Ch. 1 (Aug 1987)(10-1-90 Edition))

- (a) The Owner may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes -
  - (1) In the specifications (including drawings and designs);
  - (2) In the method or manner of performance of the work;
  - (3) In the Owner-furnished facilities, equipment materials, services, or site; or
    - (4) Directing acceleration in the performance of the work.
- (b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction interpretation or determination) from the

- Owner that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Owner written notice stating (1) the date, circumstances, and source of the order and (2) that the Contractor regards the order as a change order.
- (c) Except as provided in this clause, no order, statement, or conduct of the Owner shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.
- (d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Owner shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Owner is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.
- (e) The Contractor must assert its right to an adjustment under this clause within 30 days after (1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Owner a written statement describing the general nature and amount of proposal, unless this period is extended by the Owner. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.
- (f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

# 18. Disputes

(a) All disputes arising under this contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall within ten (10) days of commencement of the dispute be presented by the Contractor to the Owner for decision. All papers pertaining to the claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim, but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified within this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten days of its commencement, the claim will be considered only for a period commencing ten days prior to the receipt of the Owner of notice thereof.

- (b) The Contractor shall submit in detail his claim and proof thereof. Each decision by the Owner will be in writing and will be mailed to the Contractor by registered mail, return receipt requested.
- (c) If the Contractor does not agree with any decision of the Owner, he shall in no case allow the dispute to delay the work but shall notify the Owner promptly that he is proceeding with the work under protest and he may then except the matter in question from the final release.

### 19. Arbitration and Litigation

Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall, at the option of the Owner, be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association and judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof. The Owner shall exercise its option to arbitrate concurrent with the rendering of its final decision on the claim. Should it fail to render a final decision within the prescribed time or fail to exercise its option, the claim will be determined in accordance with the Rules of the American Arbitration Association as hereinbefore stated.

### 20. Time for Completion and Liquidated Damages

It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the date of beginning and the time for completion as specified in the contract of the work to be done hereunder are ESSENTIAL CONDITIONS of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the "Notice to Proceed."

The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the Owner the amount specified in the contract, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the contract for completing the work.

The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and as ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be retained from time to time by the Owner from current periodical estimates.

It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract.

<u>Provided</u>, that the Contractor shall not be charged with liquidated damages or any excess cost when the Owner determines that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the Owner; <u>Provided</u>, <u>further</u>, that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due:

- (a) To any preference, priority or allocation order duly issued by the Government;
- (b) To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, fires, flood, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather; and
- (c) To any delays of Subcontractors or suppliers occasioned by any of the causes specified in subsections (a) and (b) of this article:

  Provided, further, that the Contractor shall, within ten (10) days from the beginning of such delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the contract, notify the Owner, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of its decision in the matter.

### 21. Correction of Work

All work, all materials, whether incorporated in the work or not, all processes of manufacture, and all methods of construction shall be at all times and places subject to the inspection of the Architect/Engineer who shall be the final judge of the quality and suitability of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used. Should they fail to meet his approval they shall be forthwith reconstructed, made good, replaced and/or corrected, as the case may be, by the Contractor as his own expense. Rejected material shall immediately be removed from the site. If, in the opinion of the Architect/Engineer, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the Contract Documents, the compensation to

be paid to the Contractor hereunder shall be reduced by such amount as in the judgement of the Architect/Engineer shall be equitable.

### 22. Subsurface Conditions Found Different

Should the Contractor encounter sub-surface and/or latent conditions at the site materially differing from those shown on the Plans or indicated in the Specifications, he shall immediately give notice to the Architect/Engineer of such conditions before they are disturbed. The Architect/Engineer will thereupon promptly investigate the conditions, and if he finds that they materially differ from those shown on the Plans and/or indicated in the Specifications he will at once make such changes in the Plans and/or Specifications as he may find necessary, any increase or decrease of cost resulting from such changes to be adjusted in the manner provided in Paragraph 17 of the General Conditions.

### 23. Right of the Owner to Terminate Contract

In the event that any of the provisions of this contract are violated by the Contractor, or by any of his Subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate the contract, such notices to contain the reasons for such intention to terminate the contract, and unless within ten (10) days after the serving of such notice upon the Contractor, such violation or delay shall cease and satisfactory arrangement of correction be made, the contract shall, upon the expiration of said ten (10) days, cease and terminate. In the event of any such termination, the Owner shall immediately serve notice thereof upon the Surety and the Contractor and the Surety shall have the right to take over and perform the contract; Provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the Owner may take over the work and prosecute the same to completion by contract or by force account for the account and at the expense of the Contractor and the Contractor and his Surety shall be liable to the Owner for any excess cost occasioned the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefore.

### 24. Construction Schedule and Periodic Estimates

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule. The Contractor shall also furnish on forms to be supplied by the Owner (a) a detailed estimate giving a complete

breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

### 25. Payments to Contractor

- (a) Not later than the 15th day of each calendar month the Owner shall make a progress payment to the Contractor on the basis of a duly certified and approved estimate of the work performed during the preceding calendar month under this contract; but to insure the proper performance of this contract, the Owner shall retain five percent (5%) of the amount of each estimate until final completion and acceptance of all work covered by this contract: <a href="Provided">Provided</a>, that the Contractor shall submit his estimate not later than the first day of the month; <a href="Provided">Provided</a>, further, that the Owner may at any time after fifty percent (50%) of the work has been completed, if it finds that satisfactory progress is being made, may make any of the remaining progress payments in full; <a href="Provided">Provided</a>, further, that on completion and acceptance of each separate building, public work, or other division of the contract, on which the price is stated separately in the contract, payment may be made in full, including retained percentages thereon, less authorized deductions.
- (b) In preparing estimates the material delivered on the site and preparatory work done may be taken into consideration.
- (c) All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the Owner to require the fulfillment of all of the terms of the contract.
- (d) Owner's Right to Withhold Certain Amounts and Make Application Thereof: The Contractor agrees that he will indemnify and save the Owner harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workmen, mechanics, material men and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this contract. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature herein above designated have been paid, discharged, or waived. Contractor fails so to do, then the Owner may, after having served written notice on the said Contractor, either pay unpaid bills, of which the Owner has written notice, direct, or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of this contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor or

his Surety. In paying any unpaid bills of the Contractor, the Owner shall be deemed the agent of the Contractor, and any payment so made by the Owner, shall be considered as a payment made under the contract by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments made in good faith.

## 26. Acceptance of Final Payment Constitutes Release

The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work. No payments, however, final or otherwise, shall operate to release the Contractor or his Sureties from any obligations under this contract or the Performance and Payment Bond.

# 27. Payments by Contractor

The Contractor shall pay (a) for all transportation and utility services not later than the 20th day of the calendar month following that in which services are rendered, (b) for all materials, tools, and other expendable equipment to the extent of ninety percent (90%) of the cost thereof, not later that the 20th day of the calendar month following that in which such materials, tools, and equipment are delivered at the site of the project, and the balance of the cost thereof, not later than the 30th day following the completion of that part of the work in or on which such materials, tools, and equipment are incorporated or used, and (c) to each of his Subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his Subcontractors to the extent of each subcontractor's interest therein.

#### 28. Insurance

The Contractor shall not commence work under this contract until he has obtained all the insurance required under this paragraph and such insurance has been approved by the Owner, nor shall the Contractor allow any Subcontractor to commence work on his sub- contract until the insurance required of the Subcontractor has been so obtained and approved.

(a) <u>Compensation Insurance:</u> The Contractor shall procure and shall maintain during the life of this contract Workers' Compensation Insurance as required by applicable State or territorial law for all of his employees to be engaged in work at the site of the project under this contract and, in case of any such work sublet, the Contractor shall require the Subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the

- Contractor's Workers' Compensation Insurance. In case any class of employees engaged in hazardous work on the project under this contract is not protected under the Workers' Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide adequate employer's liability insurance for the protection of such of his employees as are not otherwise protected.
- (b) <u>Contractor's Public Liability and Property Damage Insurance</u>
  <u>and Vehicle Liability Insurance:</u> The Contractor shall procure and shall maintain during the life of this contract Contractor's Public Liability Insurance, Contractor's Property Damage Insurance and Vehicle Liability Insurance in the amounts specified in the Supplemental General Conditions.
- (c) <u>Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance</u>: The Contractor shall either (1) require each of his Subcontractors to procure and maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance of the type and in the amounts specified in the Supplemental General Conditions specified in subparagraph (b) hereof, or (2) insure the activities of this policy, specified in subparagraph (b) hereof.
- (d) Scope of Insurance and Special Hazards: The insurance required under subparagraphs (b) and (c) hereof shall provide adequate protection for the Contractor and his Subcontractors, respectively, against damage claims which may arise from operations under this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him and, also against any of the special hazards which may be encountered in the performance of this contract as enumerated in the Supplemental General Conditions.
- (e) <u>Builder's Risk Insurance (Fire and Extended Coverage)</u>: Until the project is completed and accepted by the Owner, the Owner or the Contractor is required to maintain Builder's Risk Insurance (fire and extended coverage) on a 100 percent completed value basis on the insurable portion of the project for the benefit of the Owner, the Contractor, Subcontractors as their interests may appear. The Contractor shall not include any costs for Builder's Risk Insurance (fire and extended coverage) premiums during construction unless the Contractor is required to provide such insurance; however, this provision shall not release the Contractor from his obligation to complete, according to plans and specifications, the project covered by the contract, and the Contractor and his Surety shall be obligated to full performance of the Contractor's undertaking.
- (f) <u>Proof of Carriage of Insurance:</u> The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates and date of expiration of policies. Such certificates shall also contain substantially the following statement; "The insurance covered by this certificate will not be canceled or materially altered, except after ten (10) days written notice has been received by the Owner." The City of New Britain and the Consolidated School District" must be shown on the certificate(s) as "Additional Insured".

## 29. Contract Security

The Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the contract prices as security for the faithful performance of this contract and also a payment bond in an amount not less than one hundred percent (100%) of the contract price or in a penal sum not less than that prescribed by State, territorial or local law, as security for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law.

#### 30. Additional or Substitute Bond

If at any time the Owner for justifiable cause shall be or become dissatisfied with any Surety or Sureties, then upon the Performance or Payment Bonds, the Contractor shall within five (5) days after notice from the Owner so to do, substitute an acceptable bond (or bonds) in such form and sum and signed by such other Surety or Sureties as may be satisfactory to the Owner. The premiums on such bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new Surety or Sureties shall have furnished such an acceptable bond to the Owner.

# 31. Assignments

The Contractor shall not assign the whole or any part of this contract or any monies due or to become due hereunder without written consent of the Owner. In case the Contractor assigns all or part of any monies due or to become due under this contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the Contractor shall be subject to prior claims of all persons, firms and corporations of services rendered or materials supplied for the performance of the work called for in this contract.

# 32. Mutual Responsibility of Contractors

If, through acts of neglect on the part of the Contractor, any other Contractor or any Subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or Subcontractors by agreement or arbitration if such other Contractor or Subcontractor will so settle. If such other Contractor or Subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

## 33. Separate Contract

The Contractor shall coordinate his operations with those of other Contractors. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the work. The Contractor, including his Subcontractors, shall keep informed of the progress and the detail work of other Contractors and shall notify the Architect/Engineer immediately of lack of progress or defective workmanship on the part of other Contractors. Failure of a Contractor to keep informed of the work progressing on the site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by him of the status of the work as being satisfactory for proper coordination with his own work.

### 34. Subcontracting

- (a) The Contractor may utilize the services of specialty Subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty Subcontractors.
- (b) The Contractor shall not award any work to any Subcontractor without prior written approval of the Owner, which approval will not be given until the Contractor submits to the Owner a written statement concerning the proposed award to the Subcontractor, which statement shall contain information as the Owner may require.
- (c) The Contractor shall be as fully responsible to the Owner for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- (d) The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind Subcontractors to the Contractor by the terms of the General Conditions and other Contract Documents insofar as applicable to the work of Subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.
- (e) Nothing contained in this contract shall create any contractual relation between any Subcontractor and the Owner.

# 35. Architect/Engineer's Authority

The Architect/Engineer shall give all orders and directions contemplated under this contract and specifications, relative to the execution of the work. The Architect/Engineer shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Architect/Engineer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract

or specifications, the determination or decision of the Architect/Engineer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

The Architect/Engineer shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this contract and other Contractors performing work for the Owner shall be adjusted and determined by the Architect/Engineer.

### 36. Stated Allowances

The Contractor shall include in his proposal the cash allowances stated in the Supplemental General Conditions. The Contractor shall purchase the "Allowed Materials" as directed by the Owner on the basis of the lowest and best bid of at lease three competitive bids. If the actual price for purchasing the "Allowed Materials" is more or less than the "Cash Allowance," the contract price shall be adjusted accordingly. The adjustment in contract price shall be made on the basis of the purchase price without additional charges for overhead, profit, insurance or any other incidental expenses. The cost of installation of the "Allowed Materials" shall be included in the applicable sections of the Contract Specifications covering this work.

### 37. Use of Premises and Removal of Debris

The Contractor expressly undertakes at his own expense:

- (a) to take every precaution against injuries to persons or damage to property;
- (b) to store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractor's;
- (c) to place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work;
- (d) to clean up frequently all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance:
- (e) before final payment to remove all surplus material, false- work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat, orderly condition;
- (f) to effect all cutting, fitting or patching of his work required to make the same to conform to the plans and specifications and, except with the consent of the Architect/ Engineer, not to cut or otherwise alter the work of any other Contractor.

#### 38. Quantities of Estimate

Increased or decreased quantities of minor items and elimination of minor items shall be in accordance with Form 816 Section 1.04.02.

## 39. Lands and Rights-of-Way

Prior to the start of construction, the Owner shall obtain all lands and rights-of-way necessary for the carrying out and completion of work to be performed under this contract.

# 40. General Guaranty

Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by the Owner, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of the work unless a longer period is specified. The Owner will give notice of observed defects with reasonable promptness.

#### 41. Notice and Service Thereof

Any notice to any Contractor from the Owner relative to any part of this contract shall be in writing and considered delivered and the service thereof completed, when said notice is posted, by certified or registered mail, to the said Contractor at his last given address, or delivered in person to the said Contractor or his authorized representative on the work.

### 42. Provisions Required by Law Deemed Inserted

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.

### 43. Protection of Lives and Health

In order to protect the lives and health of his employees under the contract, the Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by the Associated General Contractors of America, Inc., and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of

time from work, arising out of and in the course of employment on work under the contract. He alone shall be responsible for the safety, efficiency, and adequacy of his plant, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operation.

### 44. Subcontracts

The Contractor will insert in any subcontracts the sections 52 through 56 contained herein and such other clauses as the Department of Housing and Urban Development and /or the City of New Britain may, by instructions, require, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

# 45. Equal Employment Opportunity

During the performance of this contract the Contractor agrees as follows:

- (a) The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.
- (c) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (d) The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (e) The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the City of New Britain and the Secretary of

- Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- (f) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further contracts or Federally assisted construction contracts, in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (g) The Contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each Subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the City of New Britain may direct as a means of enforcing such provisions, including sanction for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendors as a result of such direction by the City of New Britain; the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

### 46. Interest of Member of or Delegate to Congress

No member of or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

### 47. Other Prohibited Interests

No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any such legislative, executive, supervisory or other similar functions in connection of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

## 48. Use and Occupancy Prior to Acceptance by Owner

The Contractor agrees to the use and occupancy of a portion or unit of the project before formal acceptance by the Owner, provided the Owner:

- (a) Secures written consent of the Contractor except in the event, in the opinion of the Architect/Engineer, the Contractor is chargeable with unwarranted delay in final cleanup of punch list items or other contract requirements;
- (b) Secures endorsement from the insurance-carrier and consent of the Surety permitting occupancy of the building or use of the project during the remaining period of construction; or
- (c) When the project consists of more than one building, and one of the buildings is occupied, secures permanent fire and extended coverage insurance, including a permit to complete construction. Consent of the Surety must also be obtained.

### 49. Photographs of the Project

The Contractor shall furnish videos/ photographs of the project as required under Notice to Contractor.

### 50. Suspension of Work

Should the Owner be prevented or enjoined from proceeding with work either before or after the start of construction by reason of any litigation or other reason beyond the control of the Owner, the Contractor shall not be entitled to make or assert claim for damage by reason of said delay; but time for completion of the work will be extended to such reasonable time as the Owner may be determined will compensate for time lost by such delay with such determination to be set forth in writing.

# 51. Minimum Wages

- (a) The Contractor shall post at appropriate conspicuous points at the site of the project a schedule showing all determined minimum wage rates for the various classes of laborers and mechanics to be engaged in work on the project under this contract and all deductions, if any, required by law to be made from unpaid wages actually earned by the laborers and mechanics so engaged.
- (b) All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amounts due at time of payment computed at wage rates not less than those contained in the wage determination decision of the Secretary of Labor, which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. For the purpose of

this clause, contributions made or costs reasonably anticipated under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv). Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

- (c) The City of New Britain shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract, shall be classified or reclassified conformably to the wage determination, and a report of the action taken shall be sent by the City of New Britain to the Secretary of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the City of New Britain shall be referred to the Secretary for final determination.
- (d) The City of New Britain shall require, whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the Contractor is obligated to pay a cash equivalent of such a fringe benefit, an hourly cash equivalent thereof to be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question, accompanied by the recommendation of the City of New Britain, shall be referred to the Secretary of Labor for determination.
- (e) The Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, or any bona fide fringe benefits not expressly listed in Section 1(b)(2) of the Davis-Bacon Act or otherwise not listed in the wage determination decision of the Secretary of Labor which is included in this contract, only when the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. Whenever practicable, the Contractor should request the Secretary of Labor to make such findings before the making of the contract. In the case of unfunded plans and programs, the Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (f) The specified wage rates are minimum rates only, and the owner will not consider any claims for additional compensation made by the Contractor because of payment by the Contractor of any wage rate in excess of the applicable rate contained in this contract. All disputes in regard to the payment of wages in excess of those specified in this contract shall be adjusted by the Contractor.
- (g) If the Contractor does not make payments to a trustee or other third person, he may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretary of Labor which is a part of this contract: Provided however, the Secretary of Labor has

found upon the written request of the Contractor that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

### 52. Withholding of Payments

The City of New Britain may withhold or cause to be withheld from the Contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics employed by the Contractor or any Subcontractor on the work the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic employed or working on the site of the work, all or part of the wages required by the contract, the City of New Britain may, after written notice to the Contractor or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

# 53. Payrolls and Basic Records

- (a) Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records will contain the name and address of each such employee, his correct classification, rates of pay (including rates of contributions or costs anticipated of the types described in section 1(b)(2) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- (b) The Contractor will submit weekly a copy of all payrolls to the Owner, for transmission to the City of New Britain. The copy shall be accompanied by a statement signed by the employer or his agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Secretary of Labor and that the classifications set forth for each laborer or mechanic conform with the work he performed. A submission of a "Weekly Statement of Compliance" which is required under this contract and the Copeland regulations of the Secretary of Labor (29 CFR, Part 3) and the filing with the initial payroll or any subsequent payroll of a copy of any findings by the Secretary of Labor under 29 CFR 5.5(a)(l)(iv) shall satisfy this requirement. The Prime Contractor shall be responsible for the submission of copies of payrolls of all Subcontractors. The Contractor shall make the records required under the

labor standards clauses of the contract available for inspection by authorized representatives of the City of New Britain and the Department of Labor, and shall permit such representatives to interview employees during working hours on the job.

### 54. Apprentices

Apprentices shall be permitted to work as such only when they are registered, individually, under a bona fide apprenticeship agency which is recognized by the Bureau of Apprenticeship and Training, United States Department of Labor; or, if no such recognized agency exists in a State, under a program registered with the Bureau of Apprentice- ship and Training, United States Department of Labor. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The Contractor or Subcontractor will be required to furnish to the City of New Britain written evidence of the registration of his program and apprentices as well as of the appropriate ratios and wage rates, for the area of construction, prior to using any apprentices on the contract work.

### 55. Compliance with the Copeland Anti-Kickback Act and Regulations

The Contractor shall comply with the Copeland Anti-Kickback Act and Regulations of the Secretary of Labor (29 CFR, Part 3) which are herein incorporated by reference.

### 56. Overtime

- (a) No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of forty hours in such workweek, as the case may be;
- (b) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (I), the Contractor and any Subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the clause set forth in subparagraph (I), in the sum of \$10 for each calendar day on which such

- employee was required or permitted to work in excess of the standard work week of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (I).
- (c) Withholding for unpaid wages and liquidated damages. The City of New Britain may withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or Subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2).
  - (d) Subcontracts. The Contractor shall insert in any subcontracts and clauses set forth in subparagraphs (a), (b), and (c) of this paragraph and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made

### 57. Signs

The General Contractor shall erect a sign at the project site identifying the project and indicating that the Government is participating in the development of the project. The project sign shall be substantially in accordance with instructions provided by the City of New Britain, made from 3/4 inch plywood, place in a prominent location, and maintained in good condition until completion of the project. Project sign shall be paid under Item #1220027 – Construction Signs.

# 58. Employment Practices

The Contractor (I) shall, to the greatest extent practicable, follow hiring and employment practices for work on the project which will provide new job opportunities for the unemployed and underemployed, and (2) shall insert or cause to be inserted the same provision in each construction subcontract.

### 59. Contract Termination; Debarment

A breach of Sections 45 and 52 through 56 may be grounds for termination of the contract, and for debarment as provided in 29 CFR 5.6.

### 60. Termination for Convenience of the Owner

- (a) The Owner may terminate performance of work under this contract in whole, or from time to time, in part if the Owner determines that termination is in its best interest. The Owner shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.
- (b) After receipt of a Notice of Termination, and except as directed by the Owner, the Contractor shall immediately proceed with the following

obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

- Stop work as specified in the notice.
- (2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.
- (3) Terminate all subcontracts to the extent they relate to the work terminated.
- (4) Assign to the Owner, as directed by the Owner, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Owner shall have the right to settle or pay any termination settlement proposal arising out of those terminations.
- (5) With approval or ratification to the extent required by the Owner, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for the purposes of this clause.
- (6) As directed by the Owner, transfer title and deliver to the Owner:
   (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and;
  - (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Owner.
- (7) Complete performance of the work not terminated.
- (8) Take any action that may be necessary, or that the Owner may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Owner has or may acquire an interest.
- (9) Use its best efforts to sell, as directed or authorized by the Owner, any property of the types referred to in subparagraph (6) above; provided, however, that the Contractor:
  - (i) is not required to extend credit to any purchaser, and;
  - (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Owner. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Owner under this contract, credited to the price or cost of the work, or paid in any other manner as directed by the Owner.
- (c) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Owner a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Owner. The Contractor may request the Owner to remove those items or enter into an agreement for their storage. Within fifteen days, the Owner will accept title to those items and remove them or enter into a storage agreement. The Owner may verify the list upon removal of the

- items, or if stored, within 45 days of the submission of the list, and shall correct the list, as necessary, before final settlement.
- (d) After termination, the Contractor shall submit a final termination settlement proposal to the Owner in the form and with the certification prescribed by the Owner. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Owner upon written request of the Contractor within this 1 year period. However, if the Owner determines that the facts justify it, a termination settlement proposal may be received and acted upon after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Owner may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.
- (e) Subject to paragraph (d) above, the Contractor and the Owner may agree upon the whole or any part of the amount to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (e) or (f) below, exclusive of costs shown in subparagraph (f)(3), may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be amended and the Contractor paid the agreed amount. Paragraph (f) below shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.
- (f) If the Contractor and the Owner fail to agree on the whole amount to be paid because of the termination of work, the Owner shall pay the Contractor the amounts determined by the Owner as follows, but without duplication of any amounts agreed on under paragraph (e) above:
  - (1) The contract price for completed supplies or services accepted by the Owner (or sold or acquired under subparagraph (b)(9) above) not previously paid for, adjusted for any saving of freight and other charges.
  - (2) The total of-
    - (i) The costs incurred in the performance of the work terminated, including initial cost and preparatory expense allocable thereto. but excluding any costs attributable to supplies or services paid or to be paid under subparagraph (f)(1) above;
    - (ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (i) above; and
    - (iii) A sum, as profit on subdivision (i) above, determined by the Owner under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Owner shall allow no

- profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.
- (3) The reasonable costs of settlement of the work terminated, including-
  - (i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of the termination settlement proposals and supporting data;
  - (ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and
  - (iii) Storage transportation and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.
- (g) Except for normal spoilage, and except to the extent that the Owner expressly assumed the risk of loss, the Owner shall exclude from the amounts payable to the Contractor under paragraph (f) above, the fair value, as determined by the Owner, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Owner or to a buyer.
- (h) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of the contract, shall govern all costs claimed or agreed to under this clause.
- (i) The Contractor shall have the right of appeal, under the Disputes clause, for any determination made by the Owner under paragraph (d), (f), or (k), except that if the Contractor failed to submit the termination settlement proposal within the time provided in paragraph (d) or (k), and failed to request a time extension, there is no right of appeal. If the Owner has made a determination of the amount due under paragraph (d), (f), or (k), the Owner shall pay the Contractor (1) the amount determined by the Owner if there is no right of appeal or if no timely appeal has been taken, or (2) the amount finally determined on an appeal.
- (j) In arriving at the amount due the Contractor under this clause, there shall be deducted-
  - (1) All unliquidated advanced or other payments to The Contractor under the terminated portion of this contract;
  - (2) Any claim which the Owner has against the Contractor under this contract: and
  - (3) The agreed price for, or the proceeds of sale of, materials, supplies or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Owner.
- (k) If the termination is partial, the Contractor may file a proposal with the Owner for an equitable adjustment of the price(s) of the continued portion of the contract. The Owner shall make any equitable adjustment agreed upon. any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Owner.

(I)

- (1) The Owner may, under the terms and conditions it prescribes, make partial payments and payments against incurred by the Contractor for terminated portions of the contract, if the Owner believes the total of these payments will not exceed the amount to which the Contractor will be entitled.
- (2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Owner upon demand, computed with interest at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination proposal because of a retention or other disposition of termination inventory until 10 days after the date of retention or disposition, or a later date determined by the Owner because of the circumstances.
- (m) Unless otherwise provided for in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this Contract three years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Owner, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Owner, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

### 61. Ordinance Compliance

Submission of a bid in response to this solicitation indicates that the Contractor understands and agrees to the terms of this section. Contractor shall comply with City of New Britain Code of Ordinances, Section 2-580, provisions following:

- (1) The contractor shall hire residents of the city to perform the necessary labor where possible.
- (2) In the event the contractor is restricted by labor contracts, or the required specific skills are not available in the city, the contractor may hire tradesmen and laborers who reside outside the city.
- (3) In contracts for new construction of any public works project where the total cost of all work to be performed by all contractors and subcontractors exceeds four hundred thousand dollars (\$400,000) and in contracts for remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project where the total of all work to be performed by all contractors and subcontractors exceeds one hundred thousand dollars (\$100,000), all tradesmen and laborers hired to perform under the contract shall be paid at the prevailing rates for the same work in the same trade in the city and shall receive the fringe benefits normally offered at that time for the particular trade. "Prevailing rates" as used

- herein shall mean the latest rates published by the state labor department unless otherwise required to qualify for a federal grant pertaining to the contract. As used herein, the term "contractor" shall include the general or prime contractor and shall include subcontractors performing work under the contract.
- (4) All workers furnishing the goods and services in connection with the construction shall be properly classified as employees rather than independent contractors, causing them to be treated accordingly for the purposes of pay, benefits, workers' compensation insurance coverage, social security taxes and income tax withholding.
- (5) In contracts where the total cost of all work to be performed exceeds one hundred thousand dollars (\$100,000) and in all cases wherein one or more apprentices are employed, the employer shall be affiliated with a state-certified apprenticeship program.
- (6) If a contractor signing a contract required under this subsection is found to have violated the provisions of this contract, it shall, if already paid by the City, reimburse to the City one percent of the payment that would have otherwise been owed by the City for every count of violation found. If a contractor signing a contract required under this subsection is found to have violated the provisions the contract and it has not already been paid by the City, the City shall withhold from payment one percent of the payment that would have otherwise been owed by the City for every count of violation found. For these purposes, each day of violation and each worker affected shall be deemed a separate count. Each construction contract entered into by the city shall recite that the contractor understands and agrees to the terms of this section.
- (7) As used herein, the term "contractor" shall include the general or prime contractor and shall include subcontractors performing work under the contract.

# **Index to General Conditions**

# Contents\*

		Contractor's Payrolls	53
Additional Bond	30	Contractor's Title to Materials	6
Additional Instructions	3	Copeland Regulations	55
Allowances	36	Correction of Work	21
Anti-Kickback Act	55	Damages, Liquidated	20
Apprentices	54	Data, Reports and Records	15
Arbitration	19	Debarment	59
Architect's Authority	35	Debris Removal	37
Assignments	31	Definitions	2
Bond, Security	29	Detail Drawings	3
Bond, Security, Additional	30	Different Subsurface	22
Changes	17	Discrimination, Employment	45
		Disputes	18
Completion Time	20	Drawings Detail	4
Computation of Wages	51	Emergencies	13
Condition, Subsurface	22	<b>Employment Practices</b>	58
		Engineer's Authority	35
Construction Schedule	24	Equal Employment Opportunity	45
Contract Documents	1	<b>Estimated Quantities</b>	38
Contract Security	29		
Contractor's Insurance	28	Final Payment	26
Contract Termination	23,60	Guaranty, General	40
Contractor's Mutual Responsibility	32	Inspection	14
Contractor's Obligations	11	Inspection of Materials	7
		Insurance	28

# **GENERAL CONDITIONS**

Lands and Rights-of- Way	39	Quantities of Estimate	38
Legal provisions, Inserted	42	Regulations, Kickback	55
Liquidated Damages	20	Release of Contractor	26
Litigation	19		
Materials	5	Removal of Debris	37
Member of Congress	46	Reports, Records, and Data	15
Minimum Wages	51	Responsibility of the Contractor	32
Non-Discrimination in Employment	45	Right of Owner to Terminate	23,60
Notice and Service	41	Rights-of-Way	39
Obligations of Contractor	11	Schedule of Construction	24
"Or Equal" Clause	8	Security	29
Ordinance Compliance	61	Separate Contracts	33
Overtime Requirements	56	Services, Materials, and Facilities	5
Owner's Right to Terminate	23,60	Shop Drawings	4
Patents	9	Signs	57
Payments to Contractor Payment of Employees	25	Stated Allowances	36
	51		
Payments by Contractor	27	Subcontracting	34,44
Payrolls of Contractor and Subs	53	Subcontractors' Insurance	28
Periodic Estimates	24	Subcontractors' Payrolls	53
Permits, Surveys, Regulations	10	Substitute Bond	30
Photographs	49	Subsurface Conditions	22
Posting Minimum Wage Rates	51	Superintendence by Contractor	16
Prohibited Interests	47	Surveys, Permits and Regulations	10
Protection of Lives and Health	43	Suspension of Work	50
Protection of Work, Property	13	Termination of Contract	23,59
Provisions Required by Law	42	Testing of Materials	7

# **GENERAL CONDITIONS**

Time for Completion	20
Title to Materials	6
Use and Occupancy	48
Use of Premises	37
Wage Adjustments	52
Wages, Minimum	51
Wage Underpayments	52
Weather Conditions	12
Withholding Payments	52
Work Suspension	50

### SUPPLEMENTAL GENERAL CONDITIONS

### SUPPLEMENTAL GENERAL CONDITIONS

- 1. SELECTED DEFINITIONS
- 2. INSURANCE REQUIREMENTS
- 3. MINIMUM WAGE REQUIREMENTS
- 4. ENGINEER AUTHORITIES AND DUTIES
- 5. INSPECTION
- 6. SUPERINTENDENCE BY CONTRACTOR
- 7. CHARACTER OF WORKERS, METHODS, AND EQUIPMENT
- 8. SUBCONTRACTING
- 9. CONSTRUCTION SURVEYING / LAYOUT
- 10. PERMITS AND REGULATIONS
- 11. ACCESS CONSIDERATIONS
- 12. PROTECTION OF PERSON AND PROPERTIES
- 13. SUBSURFACE CONDITIONS
- 14. EXISTING CONDITIONS FOUND DIFFERENT
- 15. EXISTING UNDERGROUND UTILITIES, PROTECTION & RESPONSIBILITY
- **16. SANITARY PROVISIONS**
- 17. OVERTIME BY CITY EMPLOYEES
- 18. NIGHT WORK AND SUNDAYS
- 19. RECORD DRAWINGS
- 20. SEWAGE AND WATER FLOWS ENCOUNTERED
- 21. POLLUTION CONTROL
- 22. CONTAMINATED OR HAZARDOUS MATERIAL

# SUPPLEMENTAL GENERAL CONDITIONS

- 23. CONNECTION TO EXISTING WORK
- 24. SNOW REMOVAL
- 25. INCLEMENT AND FREEZING WEATHER CONDITIONS
- 26. FINAL INSPECTION AND CERTIFICATE OF COMPLETION
- 27. PAYMENT TO CONTRACTOR
- 28. FINAL PAYMENT AND LIENS
- 29. DISPUTES
- 30. ARBITRATION AND LITIGATION
- 31. PURCHASE ASSIGNMENT
- 32. QUALITY OF MATERIALS
- 33. DEFECTIVE MATERIALS
- 34. UNCOVERING AND CORRECTIVE WORK
- 35. PROTECTION OF THE WORK
- 36. CLEAN-UP
- 37. WORK STOPPAGES
- 38. SHEETING, SHORING AND BRACING
- 39. COMPLIANCE WITH LAW
- 40. TERMINATION FOR CONVENIENCE OF THE CITY

#### 1. Selected Definitions

The following lists of selected definitions are included to supplement and amend those established in Section 1.01 of the reference specification "Form 816"; and said Section 1.01 is hereby made a part of this Article by Reference (including the abbreviations included therein).

Throughout these Contract Documents, the intent and meaning of the use of the following terms, or pronouns in place of them, shall be interpreted as follows (Note: the use of gender-specific pronouns or titles throughout the Contract Documents is for the sake of brevity, and are intended to refer to persons of either sex):

**Bid** - The offer or proposal of a Bidder submitted on the prescribed form, and in accordance with the provisions of the Bid Documents, setting forth the prices for the Project work.

**Bid Documents -** The documents, as issued by the Owner, enumerated in Article 3 of the Instructions to Bidders, from which, and in accordance therewith, the prospective Bidders are to base their respective Bids. All uses of the term "Contract Documents" shall be interpreted to mean the Bid Documents prior to Contract execution.

**Bid item -** An item of work specifically described in the Bid for which a price, either unit or lump sum, is provided.

**Bidder -** Any legal entity submitting a bid for the Project work.

**Contract -** The written agreement between the Owner and the Contractor regarding the prosecution of the Project work.

**Contract Documents** - The set of documents which form the written agreement between the Owner and the Contractor. The Contract Documents consist of the documents enumerated in Article 3 of the Contract together with any documents issued subsequent to the execution of the Contract which become a part of the Contract Documents in accordance with the provisions of said enumerated documents. All uses of the term "Bid Documents" shall be interpreted to intend and mean the Contract Documents following execution of the Contract.

**Contract Drawings -** The official drawings of any and every kind, or reproductions thereof, having been provided and/or approved by the Engineer, which show the location, character, dimensions, or details of the Project Work. Use of the term "**Drawings**" within these Contract Documents, or otherwise related to the Contract, shall refer to and mean the Contract Drawings.

**Contract Price** - As defined in Article 2 of the Contract. Use of the term **"Contract Amount"** within these Contract Documents, or otherwise related to the Contract, shall refer to and mean the Contract Price.

**Contract Time -** The number of calendar days allowed for completion of the Project as set forth by the Contract, plus any authorized time extensions. In case of a calendar date of completion being specified in the Contract in lieu of a number of calendar days, the Contract Time shall mean the period of time between the issuance of the Notice to Proceed and said calendar date; and the Project shall be completed by said calendar date. Use of the term "**Time of Completion**" within these Contract Documents or otherwise related to the Contract shall refer to and mean the Contract Time.

**Contractor** - The legal entity so designated in the Contract, and who shall undertake the prosecution of the Project work in accordance with the terms of the Contract Documents, acting directly or through a duly authorized representative. The Contractor shall have control over the Project Work and the prosecution thereof, subject to the applicable provisions of the Contract Documents.

**Engineer** - The Director of Engineering of the City of New Britain, also known as the "City Engineer", or the person duly acting in that capacity, acting directly or through his designated representative(s) to the extents defined by the Contract Documents.

**Extra Work** - Any Project Work not included in or contemplated by the Contract Drawings or Specifications, or any other Contract Documents, but found essential to the satisfactory completion of the Project within its intended scope. By this definition, extra work involves a change to the Project Work, and therefore is covered by Article 17 of the General Conditions. Extra work for which a Change Order is not established in accordance with the provisions of said Article 17 shall be considered as unauthorized work.

**Form 816** - The State of Connecticut Department of Transportation "Standard Specifications for Roads, Bridges and Incidental Construction, Form 816" together with the most recent "Supplemental Specifications" thereto.

**Improvement Plans** - The set of Contract Drawings, as designated in Article 2 of the Special Provisions, which have been prepared by or for the Engineer, and approved thereby, to show work and facilities specific to the Project; and which have been included in the Bid Documents. The Improvement Plans are issued as a set, and are included in the Bid Documents and/or Contract Documents as such. Use of the terms **"Plans"** or **"Improvement Drawings"** within these Contract Documents, or otherwise related to the Contract, shall refer to and mean the Improvement Plans.

**Owner -** The City of New Britain, acting through the City Purchasing Agent, and represented by the Director of the City department for which the Project is being performed, or his authorized representative.

**Project -** All activities and work contemplated and/or completed in association with the construction, modifications, repairs, and removal of facilities and/or features designated within and intended by the Contract Documents.

**Project Site -** The physical location of the facilities and/or features to be constructed, modified, repaired, or removed under the Project, and the area surrounding the same that is reasonably necessary for such construction, modifications, repairs, or removal. The construction limit line as designated on the Improvement Plans, if so designated, define the limits of the Project Site.

**Project Work -** The furnishing of all labor, materials, equipment, and incidentals necessary or convenient to the successful completion of the Project and the fulfillment of the duties and obligations imposed upon the Contractor by the Contract Documents.

**Specifications** - The minute descriptions of the details of the construction of various aspects of the Project Work which serve to complement the Contract Drawings. Such descriptions include, but are not limited to, the type, quality, and quantity of materials to be used, the methods and manner of performance of the work to be used, and the methods of measurement and payment to be used for the Project Work.

The Specifications consist of the **Special Technical Specifications**, a set of specifications created and/or compiled specifically for this Project; the **Reference Specifications**, as designated in Article 29 of the Instructions to Bidders; and any other document, or appropriate portion thereof, issued to the Contractor by the Engineer which serves the function of a specification as defined in the preceding paragraph.

**Standard Specifications -** The most recent edition of the "City of New Britain Standard Specifications for Municipal Construction"

**Supervision -** Where used to indicate supervision by the Engineer, supervision shall mean, and be limited to, the performance of obligations imposed upon and the exercise of rights granted to the Engineer by the Contract Documents, specifically including, but not limited to, those set forth in Articles 4 and 5 of these Supplemental General Conditions.

Where used to indicate the supervision by the Contractor, supervision shall mean the Contractor exercising his control over and proper superintendence of the Project Work and performing his obligations and responsibilities as set forth by the Contract Documents with respect to the Project Work and the prosecution thereof.

**Unauthorized Work -** Any work performed by the Contractor in association with the Project which qualifies as, is considered as, or is designated as unauthorized in accordance with the provisions of the Contract Documents. The Owner reserves the right to accept, make payment for, reject, and/or to order the Contractor to remove, repair, and/or replace all such work at his sole option. The Contractor shall be liable for any and all expenses associated with the inspection, removal, repair, and/or replacement of unauthorized work.

## 2. Insurance Requirements

The Contractor shall not commence work under this contract until he has obtained all necessary insurance and has filed certificates of insurance with the City. Each insurance policy shall contain a clause providing that the City must be notified sixty (60) days in advance in the event of any restrictive amendment, cancellation, or non-renewal.

The form number CON-32 entitle "CERTIFICATE OF INSURANCE" provide by the State of Connecticut; Department of Transportation shall be the only acceptable form as evidence of insurance and shall state that at a minimum, with respect to the contract, the bidder carries insurance in accordance with the requirements and stipulations listed below.

Insurance must be in effect for the whole duration of the contract and for two (2) years following acceptance of the work by the City.

Failure to provide the required insurance and certificates may, at the option of the City, be held to be a willful and substantial breach of this contract.

The contractor agrees to maintain insurance in force at all times during which services are to be performed, as well as to provide original, completed certificate(s) of insurance to the Purchasing Agent evidencing the following coverages from an insurance conpany(ies) licensed by the State of Connecticut which have at least an "A-VIII" policyholders rating according to BEST Publications' latest edition of their Key Rating Guide:

Committee Control Classifity.	Commercial	General	Liability:
-------------------------------	------------	---------	------------

General Aggregate	\$4,000,000
Prod./Compl. Operations Aggregate	\$2,000,000
Occ. Aggregate	\$2,000,000

#### Automobile Liability:

Liability Limit	\$2,000,000/occurrence
	\$4,000,000 annual agg.
	No annual agg. limit

	•				
Ρr	Oto:	2010	กวเ	1 12	bility
	()  <del> </del>	ついしょ	ומו	110	LJIIII V

Each Claim or Occurrence	\$1,000,000
Aggregate	\$1,000,000

#### Umbrella Excess Liability:

Each Occurrence	\$2,000,000
Aggregate	\$2.000.000

#### SUPPLEMENTAL GENERAL CONDITIONS

Worker's Comp. and Employer's Liability:

\$500,000 each accident \$500,000 disease policy \$500,000 disease accident limit

Owner's & Contractor's Protective Liability

\$1,000,000 per occurrence \$1,000,000 annual aggregate

"The State of Connecticut, The City of New Britain and the Consolidated School District (and their agents, officials, and employees)" must be named as "Additional Insured". Original, completed Certificates of Insurance must be presented to the Purchasing Agent prior to purchase order/contract issuance. The Contractor agrees to provide replacement/renewal certificates at least 60 days prior to the expiration of the policy. Should any of the above described policies be cancelled before the expiration date, written notice must be made to the City 60 days prior to cancellation.

If any policy is written on a "Claims Made" basis, the policy must be continually renewed for a minimum of two (2) years from the completion date of this contract. If the policy is replaced and/or the retroactive date is changed, then the expiring policy must be endorsed to extend the reporting period for claims for the policy in effect during the contract for two (2) years from the completion date.

These certificates must be presented to the Purchasing Agent prior to execution of the contract or issuance of the purchase order.

Failure to provide the required insurance and certificates may, at the option of the City, be held to be a willful and substantial breach of this contract.

#### 3. Minimum Wage Requirements

The Contractor shall pay all tradesmen and laborers hired to perform work under the Contract not less than the prevailing Federal (if applicable) and State of Connecticut wage rates, including benefits, as set forth in the Bid Requirements and Conditions Document.

## 4. Engineer - Authorities and Duties

All work performed under this Contract is subject to the supervision of the Engineer on behalf of the Owner. The Engineer has the authority to enforce compliance with the Contract Drawings, Specifications, and all other Contract Documents, in all respects.

The Engineer shall decide all questions and disputes regarding the interpretation of the Drawings, Specifications, and other Contract Documents; as well as those regarding the quality and acceptability of materials furnished, work performed, manner of

performance, rates of progress, and compliance with and acceptable fulfillment of all terms of the Contract, including compensation due thereunder. The Engineer shall also have the authority to, at his discretion; determine the points and times at which the Contractor may begin various aspects of the work and the order in which the work shall be prosecuted when the specific determination of the same is deemed to be in the best interest of the Owner.

The Engineer shall determine the amount and quality of work successfully completed by the Contractor at any time. His estimate of such completed work shall be basis for all payments by the Owner to the Contractor as compensation for Project Work completed.

All estimates and decisions of the Engineer shall be conclusive and final, except as otherwise expressly provided in the Contract Documents. In the case of the dispute of any estimate and/or decision of the Engineer by the Contractor, and proper assertion of the same in accordance with Articles 29 and 30 of these Supplemental General Conditions, such estimates and decisions of the Engineer shall not be final, but shall control until the subject dispute is properly and finally resolved. All directions of the Engineer shall be promptly and diligently carried out by the Contractor.

The Engineer shall also have all other authorities and duties as stated in the Contract Documents.

For certain projects, the Director of Engineering may designate, in writing to the Contractor, a Project Engineer, who shall be a supervisory staff person of the Bureau of Engineering. The Project Engineer shall have the authority to act as and for the Director of Engineering in all matters governed by the Contract Documents, with the exception of the Acceptance and Award of Contract and the issuance of the Certificate of Completion.

For all projects, the Director of Engineering shall designate a Project Inspector. The authorities and duties of the Project Inspector shall be as stated in Article 5 of these Supplemental General Conditions. The Engineer shall also enjoy all powers and authorities granted to the Project Inspector by said Article 5, and otherwise granted by the Contract Documents.

#### 5. Inspection

All materials furnished, equipment, facilities, and methods used, and work performed by the Contractor under this Contract, including any sampling and testing deemed necessary by the Engineer, is subject to inspection by the Project Inspector, and to the approval of the Engineer. The Contractor shall cooperate in all respects and provide any assistance and/or facilities as requested in the Project Inspector's efforts to perform such inspections. The Project Inspector is performing his duties under the direction of the Engineer and solely at the behest of and on behalf of the Owner; and solely for the purpose of protecting the Owner's interest in having the Project work performed in accordance with the Contract Documents.

The presence of the Project Inspector, or lack thereof, at the project site, or the inspection, or lack thereof, by the Project Inspector of any Project work performed by the Contractor, does not in any way release the Contractor from, or in any way alter, his responsibility for strict compliance with all requirements of the Drawings, Specifications, and other Contract Documents. In case of any dispute arising between the Contractor and the Project Inspector regarding the materials furnished, the manner of performing the work, or any other matter relating to the Contractor's compliance with the Contract Documents which may adversely affect work in progress, the Project Inspector has the authority to reject the material or stop the work until the question at issue can be referred to, and decided by, the Engineer. The Project Inspector is not authorized to revoke, alter, enlarge, relax or release any requirements of the Contract Documents nor to approve or accept any portion of the work, nor to issue instructions contrary to the Contract Documents. The Project Inspector shall in no case act as foreman or perform other duties for the Contractor. Any advice which the Inspector may give to the Contractor shall not be construed as binding the Engineer nor the Owner in any way, nor as in any way releasing the Contractor from fulfillment of the terms of the Contract Documents.

The Contractor shall keep the Project Inspector properly notified, to the satisfaction of the Project Inspector, of the time and place that he intends to perform any aspect of the work. Prior to commencing the Project Work, or any subject portion thereof, the Contractor shall obtain from the Engineer either directly or through the Project Inspector pertinent information and requirements regarding the level, methods, and frequency of inspection anticipated for any aspect of the work. The Contractor shall fully comply with the same and shall make adjustments to his scheduling and methods for the work accordingly. The Engineer may change said level, methods, and frequency of inspection required for any aspect of the work at any time as deemed fit to adjust for actual levels and variations in the material conditions, working conditions, or workmanship; and the Contractor shall comply with any such changes.

The Engineer may not deem it necessary for the Project Inspector to be present at the project site at all times when project-related activities are taking place. The Contractor is reminded; however, that all work performed is subject to inspection and of his obligation to comply with the inspection requirements set forth in the previous paragraph. Any work performed in the absence of the Project Inspector is done at the Contractor's own risk, and shall be considered unauthorized. The Contractor is especially cautioned regarding the performance of unauthorized work which may not be readily inspected at a later time, including, but not limited to, underground utility installations, placement of base, fill and backfill, and concrete reinforcing and form work; and regarding the performance of subsequent work which may render previously performed unauthorized work difficult to inspect, or which may have to be removed and replaced in order to correct previously performed unauthorized work which may be found unacceptable by the Engineer.

The Contractor shall deliver, or have delivered, promptly to the Project Inspector copies of all written correspondence relating to the project from the Contractor. All oral correspondence between the Contractor and the Engineer regarding the project shall be directed through the Project Inspector, be conducted in the presence of the Project Inspector, or specific arrangements must be made between the Contractor and the Engineer to inform the Project Inspector of the proceedings of the correspondence.

#### 6. Superintendence by Contractor

The Contractor shall, at all times during the occurrence of project activities, have present at the project site, as the Contractor's agent, a competent representative thoroughly experienced in the type of work being performed, who shall be termed the "Project Superintendent".

The Project Superintendent shall have full authority to act for the Contractor in supervision of the Project Work as well as in all other matters relating to the Project Work, to receive directions and orders from the Engineer, to promptly execute and carry out said directions and orders within the terms of the Contract Documents, and to supply all materials, equipment, tools, labor, and incidentals as may be required to appropriately perform the Project work. If the Contractor chooses, an alternate representative to act in place of the Project Superintendent in his absence may be designated. Said alternate shall have similar qualifications and equal authority to act as the Contractor's agent as does the Project Superintendent and all references to the Project Superintendent herein apply likewise to the alternate when acting in such capacity.

The Project Superintendent and alternate are subject to the review of the Engineer. The name and qualifications of the proposed Project Superintendent and alternate shall be submitted to the Engineer prior to the commencement of work under the Contract by the Contractor. The Project Superintendent and alternate shall have the appropriate training and knowledge to be considered a "competent person" under the OSHA standards, regulations, instructions, and/or other guidelines applicable for, as a minimum, excavations and confined spaces.

The Project Superintendent shall remain in that capacity for the entirety of the Contract, or until his termination of employment with the Contractor or until his removal from such capacity is agreed to, in writing, by the Engineer. Should the Project Superintendent leave the employment of the Contractor, or otherwise be relieved of his duties as Project Superintendent, during the Contract, the alternate, if designated, shall become the Project Superintendent. If no alternate has been designated, the Contractor shall propose a new Project Superintendent to the Engineer for review through the proper submittal.

In the event that the Project Superintendent is absent from the project site, or cannot be rendered present at the location of certain subject work in a reasonable time, the Project Inspector has the authority to halt for reason of lack of superintendence, and until such time as proper superintendence is again provided, any work for which he may question the materials, workmanship, or other factor which may result in a final product not meeting the requirements of the Contract Documents. Any work performed while the Project Superintendent is absent from the project site shall be considered unauthorized due to lack of superintendence; and, therefore, the Contractor will be due no additional compensation for any additional work, down time, or delays as a result thereof, including any additional work, delays, or down time which may be a result of the Project Inspector halting work in accordance with this Article.

If, in the opinion of the Engineer, a communication problem develops between the Project Superintendent and the Project Inspector due to a language barrier, the Contractor shall take all steps deemed necessary by the Project Inspector, including providing a qualified interpreter, to resolve the problem to the satisfaction of the Project Inspector.

## 7. Character of Workers, Methods, and Equipment

The Contractor shall at all times employ sufficient labor and equipment for prosecuting the several classes of work to full completion in the manner and time required by the Contract Documents.

All workers shall have sufficient skill and experience to perform properly the work assigned to them, including the operation of equipment and other specialty or skilled tasks. Any person employed by the Contractor who, in the opinion of the Engineer, does not perform his work in a proper and skillful manner, or who is intemperate, disorderly, or non-courteous toward the public, or who in any way endangers person or property by performing his duties with less than appropriate care, shall, at the direction of the Engineer, be removed from the job forthwith by the Contractor, and shall not be employed again on any portion of the work without the written approval of the Engineer. Upon request, the Engineer shall confirm in writing any such oral direction.

The Contractor shall neither permit nor allow the introduction or use of intoxicating liquors or drugs upon or about the project site by any persons under their control or responsibility during performance of project work; nor shall they permit or allow any person under their control or responsibility to perform any project work while under the influence of any intoxicating liquor or drug.

All equipment used on the work shall be in safe operating condition and shall be capable of performing its intended uses safely. The Contractor is solely responsible for the safety of all equipment used on Contract work and the manner in which it is used.

All equipment which is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet the requirements of the work and to produce a

satisfactory quality of work in a timely manner. Equipment used on any portion of the project shall be such that its use or transportation will not cause any damage or injury to roadways or property; and shall be in accordance with all applicable laws, regulations, and restrictions. The Contractor shall remove no plant, materials, equipment, or other facilities from the project site without the Engineer's permission.

When the methods or equipment to be used by the Contractor in accomplishing the various aspects of the construction are not specified in the Contract Documents, the Contractor is free to utilize any methods or equipment that will accomplish the Project work in conformity with the requirements of the Contract Documents. When the methods or equipment anticipated or proposed for use by the Contractor are other than may be specified in the Contract Documents or are other than is standard practice in Connecticut, or when the Engineer may inquire as to the methods or equipment anticipated for use, the Contractor shall demonstrate to the satisfaction of the Engineer that the subject methods or equipment will accomplish the Project work in conformity with the Contract Documents by means including, but not limited to, providing references, documentation, and demonstrations. Should the Engineer deem that any method or equipment in use by the Contractor is not satisfactory, i.e. that it does not, or will not, result in work conforming with the Contract Documents, the Contractor shall cease using the subject method or equipment and shall propose an alternative to the Engineer's satisfaction.

Should the Contractor continue to use any method or equipment subsequent to being notified of the Engineer's deeming the same not satisfactory, any work resulting or affected thereby shall be considered unauthorized subject to all restrictions and limitations accorded unauthorized work by the Contract Documents.

In the event the Contractor fails to remove from the Project site any person or unsafe equipment as required by the Engineer, or fails to furnish suitable and/or sufficient personnel for the proper prosecution of the work, the Engineer may suspend the work by written notice until such orders are complied with.

## 8. Subcontracting

- (a) In all matters relating to the Contract and enforcement of the provisions of the Contract Documents, with the exception of subarticles (c), (d), and (e) below, any subcontractors utilized to perform Contract work shall be considered employees of the Contractor; and their work shall be subject to the provisions of the Contract Documents as such. Any use of the term "subcontractor", or reference to subcontractors or subcontracting contained in the Contract Documents is strictly for convenience of the Owner and Contractor in distinguishing between regular employees of the Contractor and legal entities subcontracted by the Contractor to specifically perform work on this Project.
- (b) In accordance with the preceding paragraph, the Contractor shall be responsible for the performance, finished products, acts and omissions of his subcontractors,

and of persons either directly or indirectly employed thereby, in all respects in matters relating to the Contract and applicable provisions of the Contract Documents.

- (c) Prior to execution of the Contract, the Contractor shall furnish the Engineer with a list of all subcontractors proposed to perform work on the Project, together with the extents of the work to be performed thereby. Accompanying the list, the Contractor shall include a statement of qualifications, including related experience and listing projects involving similar work successfully completed, for those subcontractors proposed to perform major categories of the Project Work. The Contractor shall furnish all necessary City and State paperwork associated with the hiring of Subcontractors including but not limited to CLA-12's, Form 6 from Municipal Manual, etc.
- (d) The Engineer has the authority to reject, for reason of insufficient experience, unsatisfactory past performance, or any other legitimate reason which may bring into question the proposed subcontractor's successful performance of the subject work, the use of any specific subcontractor to perform Project work; and the Contractor shall abide by the same. The Contractor shall provide the Engineer with any additional information requested to assist in the evaluation of the proposed subcontractors.
- (e) The Contractor shall maintain said list of subcontractors up-to-date throughout the Project; and shall provide the Engineer with an updated copy in every instance that said list is revised. Any proposed changes to the list, following Contract execution, shall be submitted to and approved by the Engineer prior to any subcontractor not listed on the current active list held by the Engineer performing any Project work. The Engineer may require information as set forth in subarticles (c) and (d) above to assist in his evaluation of any additional subcontractors or duties proposed to be added to the list, and the Contractor shall supply the same.
- (f) Nothing contained within the Contract Documents shall create, is intended to create, or should be construed to create a contractual relationship of any kind between the Owner and any subcontractor.

## 9. Construction Surveying / Layout

Unless otherwise designated in the Special Provisions, the Contractor is responsible for all construction surveying, staking, and layout as is necessary and/or is typically required for the prosecution of the work in accordance with the Contract drawings and specifications. The Engineer shall establish bench marks and reference points as deemed necessary by the Engineer for the Contractor to meet this responsibility. The Contractor is liable for the protection of said bench marks and reference points, as well as for any existing property corner markers located within the project site; and the Project Surveyor shall reset or replace, at the Contractor's expense, any of the same

that are removed, lost, destroyed, or in any way damaged or disturbed during the prosecution of the Project Work. The Contractor assumes full responsibility for the accuracy, relative to the provided bench marks and reference points, for all dimensions and elevations measured and/or derived from the same; and it is the Contractor's responsibility to verify all such dimensions and elevations.

If so called for in the Special Provisions, the Contractor shall designate a Project Surveyor. The designation thereof, and the associated functions, duties, and responsibilities thereof, shall be in accordance with the provisions of the subject Article of the Special Provisions.

Except where separate bid items are included for all or portions of such work, all construction surveying and layout work shall be considered as included in, and incidental to, the prices bid for the various bid items in the Contract Documents.

## 10. Permits and Regulations

The Contractor shall procure and pay for all permits and licenses necessary for the execution of his work and the use of such work when completed.

The Contractor shall comply with all laws, ordinances, rules and regulations relating to the performance of the work, the protection of the adjacent property and the maintenance of passageways, guard fences or other protective facilities.

The Contractor shall, at his own expense, secure and pay to the appropriate departments (Board of Public Works, New Britain Water Department, Building Department) of the City of New Britain or State of Connecticut, the fees or charges for all permits for street excavations, pavements, sidewalks, curbs, sealing of house connection drains, pavement cuts, building, electrical, plumbing, water, subway (underground electric and telephone) and sanitary and storm water sewer permits required by the regulatory body of any of its agencies. The Contractor's attention is called to the fact that the City Engineer's office has a list of all State maintained streets which is readily available to the Contractor for inspection.

The Contractor shall comply with the applicable local laws and ordinances governing the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the improvements embraced in this Contract.

#### 11. Access Considerations

The Contractor shall conduct his work at all times and use all practical means available to minimize the interference to traffic, both vehicular and pedestrian, and the inconvenience and discomfort of adjacent residents and property owners and the general public. Except as otherwise provided for in the Special Provisions, vehicular access, as may be restricted by the prosecution of the Project work, will be maintained

at all times to all adjacent or abutting properties, except when necessary construction precludes such access for reasonable periods of time. Pedestrian access shall be maintained to all adjacent or abutting properties at all times. Emergency access to all structures and emergency facilities shall be maintained at all times. In the event that Construction activities cause vehicular access to any property to be interrupted for more than, in the opinion of the Engineer, a reasonable time, the Contractor shall construct, or make other arrangements for, reasonably equivalent access to such property to the satisfaction of the Engineer.

In the maintenance and protection of traffic, the Contractor shall abide by, in order of preference and subject to all applicable laws, 1) the rules, regulations, and directions of the New Britain Police Department, 2) the applicable provisions of the most recent edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", (MUTCD) and any supplements thereto, as published by the Federal Highway Administration of the U.S. Dept. of Transportation, 3) any directives of the Engineer, and 4) the applicable provisions of the Contract Documents.

The Contractor shall supply, maintain, and incorporate into the Project such barricades, warning lights, and directional, informational, warning, construction, and other signage, as well as any other safety precautions, as may be required, necessary, or prudent for the protection and safety of person, property, Project work and workers; and as may be required, necessary, or prudent to the maintenance of traffic flows and access in clear and convenient means (as is practical). The Contractor is referred to said MUTCD regarding the proper selection, placement, and usage of many such devices and precautions.

The Contractor is hereby notified that the New Britain Police Department may require the presence of police officers for the purpose of safety and traffic control at any location where construction activities affect a public street and the flow of traffic thereon. The Contractor is responsible for 1) contacting the traffic division of the Police Department at 826-3000 to properly notify them of the pending construction to determine what level of police presence may be required and arranging for the same, and 2) paying all costs to the Police Department for the same. Unless the necessity for police presence was not contemplated in the Project at the time of Contract execution, or by any Change Order thereafter, and is the result of the Contractor's actions or inactions, the Contractor shall be appropriately reimbursed for all such costs by the Owner.

The Contractor shall cooperate with the various parties involved in the delivery of mail, school transportation, and the collection and removal of trash and recyclables to maintain existing schedules for these services.

If a bid item for "Maintenance and Protection of Traffic" and/or other related bid items are included in the Contract, all work required or performed, and the associated expenses incurred, in accordance with the provisions of this Article are considered to be included as a part of such bid items. If there are no such bid items, or if the project is

bid lump sum, all work required or performed, and the associated expenses incurred, in accordance with the provisions of this Article are considered to be part of the project work as bid, and therefore are considered as included in the price bid for the various Bid items. The Contractor shall be due no additional compensation as a result of any work performed or expenses incurred in accordance with this Article.

# 12. Protection of Person and Property

The Contractor is responsible and liable for the protection and care of persons and property from harm or injury within the Project Site and otherwise related to his prosecution of the Project Work. The Contractor shall exercise proper precaution at all times for said protection and care of persons and property from harm or injury as a result of the Contractor's actions, or inactions, both on and off the Project site.

The Contractor shall at all times comply with the provisions of all applicable Federal, State, and local safety and health laws, codes, and regulations; and shall take such additional safety and health measures he may determine to be necessary for said protection and care, as well as any such measures that the Engineer may deem to be reasonably necessary.

At all times, as required by any applicable OSHA standards, regulations, instructions, and/ or other guidelines, the Contractor shall have at the site of any excavation, confined space, or any other aspect of the Project work regulated thereby, an employee or other authorized representative having the appropriate training, knowledge, and <a href="mailto:authority">authority</a> to be considered a "competent person" regarding such work under said OSHA standards, regulations, instructions, and/or other guidelines.

The Contractor shall install and maintain such barricades, fences, and other protective and warning facilities and measures, and shall employ such methods and means, as may be appropriate, required, and/or directed, to protect person and property from excavations, equipment, stored materials, slopes, ditches, flowing water or sewage, exposed utilities, and/or other aspects of the work which may pose a hazard.

All applicable aspects of the Project shall be in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" as published by the Associated General Contractors of America, to the extent said provisions are not in conflict with applicable laws or regulations. Said safety provisions are hereby made a part of this Article by reference.

To the extent possible, the Contractor shall plan the work in such a manner as to avoid the use of explosives in the close proximity structures or utilities. When the use of explosives is necessary for the prosecution of the work, the Contractor shall use the utmost care not to endanger person or property, and shall comply with the requirements of all applicable laws, codes, and regulations. The Contractor is responsible to notify all nearby property owners, the owners of nearby utilities, and all others who may be affected, of the Contractor's intention to use explosives on the project; and such notice

shall be given sufficiently in advance of the use of the explosives as to allow the noticees and the Contractor to take any actions deemed necessary for protection of person and property. Such notice shall not relieve the Contractor from responsibility for any damage and/or claims resulting from blasting operations.

The Contractor shall be held responsible for, and required to make restitution at his own expense for, any and all damage to person or property resulting from any act, omission, carelessness, or neglect on the part of the Contractor, or the agent or employees thereof, during the prosecution of the work, or lack thereof, and until its final acceptance.

The Contractor shall maintain an accurate record of all cases of death, occupational disease, and/or injury requiring medical attention or causing loss of time from work, and/or all cases of property damage, occurring as a result of or in the course of the prosecution of work under this Contract. The Contractor shall promptly furnish the Engineer with reports concerning these matters.

The Contractor and his actions shall also be subject to the provisions of Section 1.07.09 of the Reference Specification "Form 816"; and said Section 1.07.09 is hereby made a part of this Article by reference.

All work performed or required, and the associated expenses incurred, in accordance with the provisions of this Article are considered part of the project work as bid, and therefore are considered as included in the price bid for the various Bid items. The Contractor shall be due no additional compensation as a result of such work performed or expenses incurred.

#### 13. Subsurface Conditions

The Contractor is responsible for performing whatever research and/or investigations deemed appropriate for determining the existing soil, groundwater, or other subsurface conditions which may have bearing on the Project work prior to submitting a bid on the Project (reference Article 10 of the Instructions to Bidders). Any information regarding borings, test pits, or other soils or subsurface conditions included in the Contract Documents is provided solely as a courtesy to be used as seen fit by the Contractor; and does not in any way relieve the Contractor of any responsibilities stated in the Contract Documents. The Contractor will not be granted any additional compensation, or any other extra, for any additional work or costs associated with subsurface conditions which could have been reasonably expected to exist and/or to interfere with, or otherwise affect, the Project work in any way.

## 14. Existing Conditions Found Different

In addition to showing the construction proposed under this Project, the drawings show certain information obtained by the Owner regarding conditions and features which exist at the site of the work, both at and below the surface of the ground.

The Owner and the Engineer expressly disclaim any responsibility for the accuracy or completeness of the information given on the drawings with regard to the existing conditions and features and the Contractor will not be entitled any extra compensation on account of inaccuracy or incompleteness of such information except as provided herein. It is specifically called to the Contractor's attention that <u>all</u> services, laterals, etc., <u>are not</u> shown on the Contract Drawings and it shall be his responsibility to locate and protect the same. The information which is shown is only for the convenience of the Contractor, who must verify this information to his own satisfaction.

The giving of this information upon the Contract Drawings will not relieve the Contractor of his obligations to support and protect <u>all</u> existing utilities, structures and fixtures, which may be encountered during the construction of the work and to repair any and all damages done to such existing utilities.

The Contractor shall immediately notify the Engineer of any existing or latent conditions encountered during the prosecution of Project work which are significantly different from those shown or described in the Contract Documents or from those expected by the Contractor, and/or which may affect or alter the Project work in any way contrary to the Plans and Specifications; and shall, upon such encounter, immediately suspend all work relating to, or affected or altered by, said different conditions.

The Engineer shall thereupon promptly investigate said conditions and, if the conditions are found to be substantially different, shall give such advice and/or instructions, and shall make such adjustments and/or alterations to the Drawings, Specifications, proposed work, quantities, and/or compensation due to the Contractor, as deemed appropriate and/or necessary, and in a manner consistent with the applicable provisions of the Contract Documents. The Contractor shall not resume the performance of any work suspended in accordance with the provisions of this Article until being instructed to do so by the Engineer.

Any work associated with existing conditions found different which is performed by the Contractor and which is, in the opinion of the Engineer, in non-compliance with the provisions of this Article shall be considered unauthorized. Any such unauthorized work shall not be considered to be extra work nor shall any additional compensation be due the Contractor therefor, except as otherwise determined by, and at the sole discretion of, the Engineer.

#### 15. Existing Underground Utilities - Protection and Responsibilities

The Contractor must notify Call Before You Dig (Tel. 1-800-922-4455) in accordance with Public Act No. 81-146 & 77-350 at least forty-eight (48) hours prior to start of construction, and shall keep such notification properly updated as the prosecution of the Project work proceeds.

The Contractor should inquire of the City of New Britain Broad of Water Commissioners, Southern New England Telephone Company, Northeast Utilities (Helco & Eversource), Connecticut Natural Gas Corporation, Comcast and the City Public Works Department and any other public utility companies as to the locations of their facilities, particularly house service pipes, in the vicinity of his trenches and mark or cause to have marked on the site the locations of such pipes, etc. For the guidance of his employees and so that damage to such pipes may be avoided. The Contractor shall protect water pipes from freezing at all times during cold weather.

The Contractor prior to opening an excavation shall make every effort to determine whether underground installation, i.e., sewer, water, fuel, electric lines, etc., will be encountered and if so, where such underground installations are located. When the excavation approaches the estimated location of such an installation, the exact location shall be determined by careful probing or hand digging, and when it is uncovered, proper supports shall be provided for the existing installation. The Contractor shall, without expense to the City, do everything necessary to provide proper support, protect and maintain from direct or indirect injury all utilities, pipes, bridges, conduits, sewers, drains, wires, poles, or fixtures of all kinds lawfully in the line of excavation or adjacent thereto, and all fences, walls, buildings or other structures and property in the vicinity which may be damaged by the work herein contemplated. He shall give at least 24 hours notice, before breaking ground, to the owners of the structures, pipes or wire conduit that may be affected by his operations and shall not cause any hindrance to or interference with any such owners or their agents in protecting or repairing their property should they wish to do so, but will suffer them to take all such measures as they may deem necessary for said purpose.

The Contractor shall be responsible for the repair of or the replacement of any underground utilities, laterals or mains broken or damaged and any costs for maintenance service while line is out of service along the course of construction. Omissions or improperly located utility lines on the contract drawings will not be cause to hold the Owner liable.

The Engineer may require the Contractor to take proper steps to protect the main lines of public utilities in the immediate vicinity of the work when endangered by the operation of the Contractor, and, if the Contractor fails to take adequate provisions to protect such lines or structures the Engineer may employ others to perform protective work, as may be reasonably needed, at the Contractor's expense.

Guard rails, posts, guard cables, signs, poles, markers, mail boxes, fences, wall and stone walls, etc., which are temporarily removed to facilitate construction, shall be replaced and restored in their original condition to the satisfaction of the Owner or Engineer.

## 16. Sanitary Provisions

The Contractor shall provide an approved field toilet to maintain a neat and sanitary condition on the job site. The Contractor shall commit no public nuisance. These facilities shall be cleaned regularly and in all ways comply with the State and City Health Regulations. The Contractor shall provide a safe drinking water supply for use of all working personnel on the work site including the construction inspector.

## 17. Night Work and Sundays

Night work or work on Saturdays, Sundays or legal holidays requiring the presence of an inspector will be permissible upon the approval of the Engineer except in emergencies. Should night work be permitted, required or desired to operate continuous night work or for emergency night work, the lighting, safety and other facilities which are deemed necessary for performing such night work shall be provided by the Contractor and comply with the applicable safety codes. Night work, work on Saturdays, Sundays or legal holidays, if performed, the Contractor shall receive <u>no</u> extra payment, but compensation shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the bid.

#### 18. Record Drawings

Unless otherwise designated in the Special Provisions, the Contractor shall be responsible for preparing various record drawings for the City's files. These drawings shall be executed in the manner specified in the edition of the "City of New Britain, Bureau of Engineering, Requirements for As-Built Maps" current at the time this Contract was entered into. Typical maps and copies of the current standards are available for review and purchase at the Bureau of Engineering.

#### 19. Sewage and Water Flows Encountered

The Contractor shall furnish all equipment and take all precautions and steps necessary and appropriate for conveying and perpetuating, in their entirety, all sanitary sewage, storm, groundwater, surface water, and flood water flows encountered in the prosecution of the Project Work in a safe, sanitary, and non-degrading manner. Such work includes, if necessary and appropriate, but is not limited to, furnishing, installing, and operating pumps and conduits, constructing coffer dams, diversion channels, and sumps, the blocking of conduits, and other means and methods used for such purposes.

Sanitary sewage flows shall be conveyed in a closed conduit and shall only be discharged into the City's sanitary sewer system. Under no circumstances shall the contractor willfully allow sewage flows to discharge to the storm drainage system, surface drainways, or any surface water.

Water discharged to the storm drainage system, any surface drainway, or any surface water shall be in accordance with the regulations and standards of the Connecticut Department of Environmental Protection and/or any other regulating authority. In addition, the discharge of water onto private property is only allowed with the prior written permission of the subject property owner and the Engineer.

All aspects of handling sewage and water encountered during prosecution of the Project work is subject to the supervision and approval of the Engineer. Any approval or intervention of the Engineer in such matters in no way relieves the Contractor of any of his responsibilities to comply with any and all applicable laws, regulations, permits, orders, and/or directives established or given by a regulating authority, and/or the safe perpetuation of any such flows.

The Contractor is responsible for knowledge of and compliance with all aspects of any laws, regulations, permits, orders, and/or directives established or given by a regulating authority relating to the handling of sewage and water flows associated with the Project. The Contractor is responsible for obtaining all approvals, and for performing all sampling, testing, and/or analyses, which may be required by the same.

The Contractor is also responsible for any damages to any facilities or properties as a result of his efforts to handle sewage and water encountered, and for the complete restoration of the same upon the completion of any measures which affected the facility or property.

Except where a separate bid item (or items) is included in the Contract Documents for such work, all work and other aspects of handling water and sewage flows shall be considered as included in, and incidental to, the prices bid for the various bid items in the Contract Documents. The Contractor will not be granted any additional compensation, or any other extra, for any work or other aspect of handling water and sewage flows which could have been reasonably expected to be required or necessary in the prosecution of the Contract Work, or which is a result of the Contractor's actions, lack of action, negligence, or failure to comply with any aspect of this Article, or any other provision of the Contract Documents.

#### 20. Pollution Control

The Contractor shall conduct his operations in conformity with all applicable permits, regulations, and standards of the Connecticut Department of Environmental Protection, and any other Federal, State, or local agency or authority having jurisdiction thereover, concerning water, air, and noise pollution and the handling and disposal of toxic or hazardous materials.

Pollution control measures shall apply to all contractor activities including, but not limited to, the construction site, waste and disposal areas, borrow sites and gravel banks, storage areas, haul roads, access roads, and detours.

In case of the failure on the part of the Contractor to perform pollution control work in a timely manner, the Engineer may, upon 48 hours' written notice, arrange for the performance of the subject work by approved forces, and the cost thereof will be deducted from any monies due, or which may become due, the Contractor under the Contract. In the case of an emergency the Engineer may take such actions immediately upon what he considers to be failure of the Contractor to perform pollution control work in a timely fashion.

(a) Water Pollution Control Measures - The Contractor shall exercise every reasonable precaution throughout the life of the contract to prevent, control and abate siltation, sedimentation and pollution of all surface waters, underground water systems and inland wetlands. The City of New Britain will obtain all permits which may be required concerning inland wetlands and watercourses for work appearing on the plans. The Contractor shall obtain any permits and pay any fees required for work not included on the plans in the fulfillment of his contract concerning the removal of material, depositing of material in, obstruction of, construction within, altering or polluting of any inland wetland, tidal wetland, coastal or navigable water, streams, ponds, lakes, water supplies or other water bodies.

Construction operations in water areas shall be held to a practicable minimum and shall be restricted to those areas which must be entered for the planned construction and for temporary operations pursuant thereto. The frequent fording of live streams shall be avoided during the construction and the use of temporary bridges or culverts is preferred. Mechanized equipment shall not be operated promiscuously in live streams. Roiling of waters shall be cause for the construction of diversion dikes or settling basins to avoid sediment problems.

The banks and beds of waterways and impoundments shall be properly cleared of all debris, falsework and obstructions placed therein or caused by the construction operations, but which are not a part of the planned improvement.

The dumping of oil or other deleterious materials on the ground is expressly forbidden. The Contractor shall provide a means of catching and retaining drained oil, removed oil filters, or other deleterious materials and of properly disposing of same, subject to the approval of the Engineer.

(b) Air Pollution Control Measures - The Contractor shall exercise every reasonable precaution throughout the life of the contract to safeguard the air resources of the State by Controlling or abating air pollution as set forth by the Department of Environmental Protection's regulations. These measures shall include the control and abatement of dust, fumes, mist, smoke, vapor, gas, aerosol, other particulate matter, odorous substances or any combination thereof arising from the construction operations, hauling, storage or manufacture of materials. All trucks carrying materials susceptible to having pollutants enter the ambient air are to be covered during transit.

- (c.) Noise Pollution Control Measures The Contractor shall take measures to control the noise intensity to comply with the prescribed ratings as set forth by the regulations of the Department of Environmental Protection, the Occupational Safety and Health Administration and any other agency of the State or Federal government.
- (d) Erosion and Sedimentation Control Measures All watercourses shall be protected from sedimentation, both during and after construction. This provision applies particularly to dewatering activities, storage of excavated or stockpiled material, trench excavation, and placement of compacted berms and embankments. The Contractor shall control erosion and sedimentation in accordance with the publication entitled "2002 Connecticut Guidelines for Soil Erosion and Sediment Control" issued by the Connecticut Council on Soil and Water Conservation, effective May 2002, or as otherwise approved by the Engineer. Provisions shall include, but not be limited to, haybale check dams across any outlet channels and at the toe of all embankments under construction, and temporary culverts at all stream crossings, such that water which flows downstream does not contain additional sediments due to the Project work. The Contractor shall submit details of his erosion and sediment controls to the Engineer for review.
- (e) Cleaning of Adjacent Streets The Contractor shall sweep, and use other methods as necessary, to keep adjacent streets clean of mud, dirt, and debris caused by Project activities. Such sweeping or other methods shall be used on a daily basis when mud, dirt, or debris has been deposited on a street.

The Contractor is responsible for knowledge of and compliance with all aspects of any laws, regulations, permits, orders, and/or directives established or given by a regulating authority relating to pollution control associated with the Project. The Contractor is responsible for obtaining all approvals, and for performing all sampling, testing, and/or analyses, which may be required by the same.

Except where a separate bid item (or items) is included in the Contract Documents for such work, all work and other aspects of pollution control shall be considered as included in, and incidental to, the prices bid for the various bid items in the Contract Documents. The Contractor will not be granted any additional compensation, or any other extra, for any work or other aspect of handling water and sewage flows which could have been reasonably expected to be required or necessary in the prosecution of the Contract Work, or which is a result of the Contractor's actions, lack of action, negligence, or failure to comply with any aspect of this Article, or any other provision of the Contract Documents.

#### 21. Contaminated or Hazardous Material

In the event the Contractor, during the prosecution of Contract Work, encounters any material that is believed to be contaminated, toxic, or hazardous to person or the environment, provided that the occurrence of, handling of, and protection of and from the subject material was not contemplated at the time of Contract execution, the

Contractor shall immediately cease work in the immediate area and notify the Engineer. If the nature of the material or the situation under which it is encountered is such that immediate notification of the Connecticut Dept. of Environmental Protection or other regulating agency is required, such notification is the responsibility of the Contractor.

Upon said notification of the Engineer by the Contractor, the Engineer shall take the steps deemed necessary for making investigations and determinations regarding the handling of, protection of and from, and/or the disposal of the subject material. The Engineer shall delineate, or have delineated, a "no-work" area in the vicinity of the subject material within which all project work shall remain suspended until written permission to the contrary is given by the Engineer. The Contractor shall follow all directions and recommendations of the Department of Environmental Protection, or any other regulating authority having jurisdiction, and shall comply with all applicable laws and regulations, regarding the handling of, protection of and from, and/or disposal of the subject material. The Contractor shall also cooperate fully with any special personnel whom the Owner may retain the services of for the same.

## 22. Connection to Existing Work

The Contractor shall remove such existing masonry, concrete, equipment and piping as is necessary, in order to make the proper connections to the existing work at the locations shown. Also, he shall make the necessary pipe line, roadway and other connections required, in order that on completion of the Contract, water, sewage, or storm water, or as the case may be, will flow through the pipe lines and structures. No extra payment will be made for this work, but the entire cost shall be included in the unit or lump sum prices bid for the various items of the work to be done under this Contract.

#### 23. Snow Removal

If the Contractor's operations or occupancy of any public street or highway, or the rough surfaces over any trench or area being maintained by the Contractor, shall interfere with the removal or plowing of snow or ice by the public authorities or property owners, or sanding of icy surfaces, in the ordinary manner with regular highway equipment, then the Contractor shall perform such services for the public authority or property owner without charge; or failing to do so, shall reimburse the said authority, owners or the City for any additional cost they incur for doing such work occasioned by the conditions arising from the Contractor's operations, occupancy or trench surfaces, together with the damage to the equipment of said parties by those conditions, or claims of any party for damage or injury or loss by reason of failure to remove snow or ice, or to sand the icy spots under those conditions.

## 24. Inclement and Freezing Weather Conditions

In the event of temporary suspension of work, or during inclement weather, or whenever the Engineer shall direct, the Contractor will, and will cause the Subcontractor to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Engineer, any work or materials have been damaged by the failure of the Contractor or Subcontractors to protect the work, such work or materials shall be removed and replaced at the expense of the Contractor.

Unless <u>written</u> permission is given, work liable to be affected by frost or freezing shall be suspended during freezing weather when work proceeds under freezing conditions the Contractor shall provide approved facilities for heating the materials and for protecting the finished work.

#### 25. Final Inspection and Certificate of Completion

Upon the completion of all work whatsoever required, the Contractor must submit a written request to the City Engineer for a final inspection. The Engineer and/or his representative, representatives of the governing authority of the completed project (re: Public Works, Water Dept., etc.) and the Contractor shall hold a semi-final inspection of all work to ascertain that the work is acceptable to the governing authority.

Unacceptable work shall be corrected at no additional costs. After approval, the Engineer shall file a written certificate with the Owner and with the Contractor as to the entire amount of work performed and compensation earned by the Contractor including extra work and compensation thereof.

#### 26. Payment to Contractor

The Owner agrees to pay the Contractor monthly or as nearly once a month as possible, ninety-five (95%) percent of the whole amount due the Contractor for the amount of work which the Engineer shall estimate as done up to the last day of that particular month. Payment of the estimated bill shall follow within thirty days after the receipt and approval of the estimate. It shall also be required in this Contract that the weekly payrolls and basic records (reference General Conditions paragraph 53) be submitted at the same time with the estimated monthly bill.

#### 27. Final Payment and Liens

Thirty (30) days after the filing of such certificate of completion, the Owner shall pay to the Contractor 95 percent of the amount therein stated, less all prior payments and advances whatsoever to or for the account of the Contractor. All prior estimates and payments, including those relating to extra work shall be subject to correction by this payment which is throughout this Contract called Final Payment. The final 5% of the total amount will be paid at the end of one year (12 months) maintenance period, provided the whole of the work is at that time in conformity with the requirements of the Contract; if not, then as soon thereafter as the work shall be made to conform thereto. Said maintenance period for all parts of the work shall not commence prior to filing of the certificate of completion. After final acceptance of the work, the Contractor may request the filing a maintenance bond covering the maintenance period for the total

amount of the retained 5% percent. If the City approves the maintenance bond option, the retained 5% percent shall then be paid to the Contractor.

Neither the final Contract payment nor any part of the retainage thereto shall become due to the Contractor until he has, if required, delivered to the Owner either a complete release of all liens arising out of the Contract or receipts in full in lieu thereof. In addition, if required, the Contractor shall furnish the Owner an affidavit that states that so far as he has knowledge or information, the releases and receipts described above include all labor, material and equipment for which a lien could be filed. In the event a subcontractor or materials provider is unwilling or unable to furnish a release or receipt in full, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against any liens. If any liens remain unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney fee.

#### 28. Disputes

- a) All disputes arising under this contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall within ten (10) days of commencement of the dispute be presented by the Contractor to the Owner for decision. All papers pertaining to the claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim, but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified within this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten days of its commencement, the claim will be considered only for a period commencing ten days prior to the receipt of the Owner of notice thereof.
- b) The Contractor shall submit in detail his claim and proof thereof. Each decision by the Owner will be in writing and will be mailed to the Contractor by registered mail, return receipt requested.
- c) If the Contractor does not agree with any decision of the Owner, he shall in no case allow the dispute to delay the work but shall notify the Owner promptly that he is proceeding with the work under protest and he may then except the matter in question from the final release.

#### 29. Arbitration and Litigation

Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall, at the option of the Owner, be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association and judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof. The Owner shall exercise its option to arbitrate concurrent

with the rendering of its final decision on the claim. Should it fail to render a final decision within the prescribed time or fail to exercise its option, the claim will be determined in accordance with the Rules of the American Arbitration Association as hereinbefore stated.

#### 30. Purchase Assignment

The contractor or subcontractor offers and agrees to assign to the public purchasing body all right, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act, 15 U.S.C. Section 15, or under Chapter 624 of the General Statutes of Connecticut, arising out of the purchase of services, property or intangibles of any kind pursuant to a public purchase contract or subcontract. This assignment shall be made and become effective at the time the public purchasing body awards or accepts such contract, without further acknowledgment by the parties.

#### 31. Quality of Materials

All work done and materials furnished shall be <u>new</u> and of the best quality customarily used in or furnished for installation of the character of that proposed. Many features of the proposed work are described in detail herein, but the failure to describe any part of the proposed work or any detail or appurtenance thereof shall not be an exception to the above rule. The absence of requirements in the contract or specifications covering details usually included in first-class installation of this type shall not excuse the Contractor for their omission in this work.

#### 32. Defective Materials

The Engineer may reject any or all defective or damaged material or any material not, in his opinion, in conformity with the specifications. Material which may at any time be rejected shall be promptly removed from the site. If the Contractor does not remove defective material promptly after written notice, the Engineer may cause such removal by such means as he shall select and at the Contractor's expense. No defective or damaged materials shall be used in the work. All defective material shall be conspicuously marked.

#### 33. Uncovering and Corrective Work

If any portion of the work should be covered contrary to the request of the Engineer or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Engineer, be uncovered for his observation, and the Contractor shall bear the costs of uncovering and recovering and shall be responsible for resulting delays, even if the uncovered work is found to be in accordance with the Contract Documents.

The Contractor shall promptly correct all work rejected by the Engineer as defective or as failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all cost of correcting such rejected work, including compensation for the Engineer's additional services made necessary thereby.

If the Contractor fails to correct any such defective or nonconforming work to the satisfaction of the Engineer within a reasonable time after notification of the same, the Owner may, upon written notification to the Contractor of his intent to do so, separately arrange for the work to be corrected as he deems fit; and deduct any costs associated with the arrangements for and performance of the corrective work from any monies due, or to become due, the Contractor. Should such costs exceed the monies due, or to become due, the Contractor, than the Contractor shall be liable to the Owner for all amounts exceeding those due, or to become due, the Contractor.

#### 34. Protection of the Work

The Contractor shall protect all work done under this contract and all work done by other contractors within the limits of this contract during the progress of the work and until completion and acceptance, from injury by reason of any work under this contract or by reason of any negligence on his part, or by reason of weather conditions.

#### 35. Clean-up

Upon suspension or completion of the work or of any section thereof, the Contractor shall remove all materials, equipment and rubbish and shall leave the premises in a neat and orderly condition. The premises shall, during the progress of the work, be kept clean, presentable and satisfactory to the Engineer, and shall be left so at the completion of the contract.

#### 36. Work Stoppages

Should the City be prevented or enjoined from proceeding with work either before or after the start of construction by reason of any litigation or other reason beyond the control of the City, the Contractor shall not be entitled to or assert claim for damage by reason of said delay. However, time for completion of the work will be extended to such reasonable time as the City may determine by means of a written Change Order.

#### 37. Sheeting, Shoring and Bracing

Where necessary, the sides of trenches and excavations shall be supported by adequate sheeting, shoring, and bracing. The Contractor shall be held accountable and responsible for the sufficiency of all sheeting, shoring, and bracing used and for all damage to persons, property, streets or utilities resulting from the improper quality, strength, placing, maintaining, or removing of the same. Where sheeting is removed, care shall be taken not to disturb the new work or existing utilities and structures.

No sheeting is to be left in place unless expressly permitted by the Engineer. No direct payment will be made for sheeting, shoring, and bracing, and compensation for such

work and all expenses incidental thereto shall be considered as included in the unit prices bid for the various items of this contract.

#### 38. Compliance with Law

- a) In the administration and execution of the Project, the Applicant shall comply with all pertinent provisions of local, State and Federal law, and failure to do so shall constitute a default by the Applicant under this Agreement.
- b) The contract is subject to the provisions of Section 4-114a(a)-(e) of the Connecticut General Statutes which state: "The contractor agrees and warrants that in the performance of this contract he will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, retardation or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut. If the contract is for a public works project, the contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such project. The contractor further agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission concerning the employment practices and procedures of the contractor as relate to the provisions of this section and Section 46a-56."
- c) This contract is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill promulgated June 16, 1971 and, as such, this contract may be canceled, terminated or suspended by the State Labor Commissioner for violation or of noncompliance with said Executive Order No. or any State or Federal Law concerning nondiscrimination, notwithstanding that the Labor Commissioner is not a party to this contract. The parties to this contract, as part of the consideration hereof, agree that said Executive Order No. Three is incorporated herein by reference and made a part hereof. The parties agree to abide by said Executive Order and agree that the State Labor Commissioner shall have continuing jurisdiction in respect to contract performance in regard to nondiscrimination, until the contract is completed or terminated prior to completion. The contractor agrees as part consideration hereof, that this contract is subject to the guidelines and rules issued by the State Labor Commissioner to implement Executive Order No. Three and that he will not discriminate in his employment practices or policies, will file all reports as required, and will fully cooperate with the State of Connecticut and the State Labor Commissioner.
- d) This contract is subject to the provisions of Executive Order No. Seventeen of Governor Thomas J. Meskill promulgated February 15, 1973, and as such, this contract may be canceled, terminated or suspended by the Contracting agency

or the State Labor Commissioner for violation of or noncompliance with said Executive Order No. Seventeen, notwithstanding that the Labor Commissioner may not be a part to this contract. The parties to this contract, as part of the consideration hereof, agree that the Executive Order No. Seventeen is incorporated herein by reference and made a part hereof. The parties agree to abide by said Executive Order and agree that the contracting agency and the State Labor Commissioner shall have joint and several continuing jurisdiction in respect to contract performance in regard to listing all employment openings with the Connecticut Employment Service.

## 39. Termination for Convenience of the City

- a) The City may terminate performance of work under this contract in whole, or, from time to time, in part, if the City determines that termination is in its best interest. The City shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.
- b) After receipt of a Notice of Termination, and except as otherwise directed by the City, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under his clause:
  - 1) Stop work as specified in the notice.
  - 2) Place no further subcontracts or orders for materials, services, or facilities related to the terminated work.
  - 3) Terminate all subcontracts to the extent they relate to the work terminated.
  - 4) Assign to the City, as directed by the City, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the City shall have the right to settle or pay any termination settlement proposal arising out of those terminations.
  - 5) With approval or ratification to the extent required by the City, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for the purposes of this clause.
  - 6) As directed by the City, transfer title and deliver to the City (I) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the City.
  - 7) Complete performance of the work not terminated.
  - 8) Take any action that may be necessary, or that the City may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the City has or may acquire an interest.

- 9) Use its best efforts to sell, as directed or authorized by the City, any property of the types referred to in subparagraph (6) above; provided, however, that the Contractor (I) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the City. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the City under this contract, credited to the price or cost of the work, or paid in any other manner as directed by the City.
- c) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the City a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the City. The Contractor may request the City to remove those items or enter into an agreement for their storage. Within fifteen days, the City will accept title to those items and remove them or enter into a storage agreement. The City may verify the list upon removal of the items, or if stored, within 45 days of the submission of the list, and shall correct the list, as necessary, before final settlement.
- d) After termination, the Contractor shall submit a final termination settlement proposal to the City in the form and with the certification prescribed by the City. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the City upon written request of the Contractor within this 1 year period. However, if the City determines that the facts justify it, a termination settlement proposal may be received and acted upon after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the City may determine, based on the information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.
- e) Subject to paragraph (d) above, the Contractor and the City may agree upon the whole or any part of the amount to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (e) or (f) below, exclusive of costs shown in subparagraph (f)(3), may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be amended and the Contractor paid the agreed amount. Paragraph (f) below shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.
- f) If the Contractor and the City fail to agree on the whole amount to be paid because of the termination of work, the City shall pay the Contractor the amounts determined by the City as follows, but without duplication of any amounts agreed on under paragraph (e) above:

- 1) The contract price for completed supplies or services accepted by the City (or sold or acquired under subparagraph (b)(9) above) not previously paid for, adjusted for any saving of freight and other charges.
- 2) The total of
  - i. The costs incurred in the performance of the work terminated, including initial cost and preparatory expense allocable thereto. but excluding any costs attributable to supplies or services paid or to be paid under subparagraph (f)(1) above;
  - ii. The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (I) above; and
  - iii. A sum, as profit on subdivision (I) above, determined by the City under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the City shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.
- 3) The reasonable costs of settlement of the work terminated, including-
  - Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of the termination settlement proposals and supporting data;
  - ii. The termination and settlement of subcontracts (excluding the amounts of such settlements); and
  - iii. Storage transportation and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.
- g) Except for normal spoilage, and except to the extent that the City expressly assumed the risk of loss, the City shall exclude from the amounts payable to the Contractor under paragraph (f) above, the fair value, as determined by the City, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the City or to a buyer.
- h) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of the contract, shall govern all costs claimed or agreed to under this clause.
- i) the Contractor shall have the right of appeal, under the Disputes clause, for any determination made by the City under paragraph (d), (f), or (k), except that if the Contractor failed to submit the termination settlement proposal within the time provided in paragraph (d) or (k), and failed to request a time extension, there is no right of appeal. If the City has made a determination of the amount due under paragraph (d), (f), or (k), the City shall pay the Contractor (1) the amount

determined by the City if there is no right of appeal or if no timely appeal has been taken, or (2) the amount finally determined on an appeal.

- j) In arriving at the amount due the Contractor hereby, there shall be deducted:
  - 1) All unliquidated advanced or other payments to The Contractor under the terminated portion of this contract;
  - 2) Any claim which the City has against the Contractor under this contract; and
  - The agreed price for, or the proceeds of sale of, materials, supplies or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the City.
- k) If the termination is partial, the Contractor may file a proposal with the City for an equitable adjustment of the price(s) of the continued portion of the contract. The City shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the City.

I)

- 1) The City may, under the terms and conditions it prescribes, make partial payments and payments against incurred by the Contractor for terminated portions of the contract, if the City believes the total of these payments will not exceed the amount to which the Contractor will be entitled.
- 2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the City upon demand, computed with interest at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination proposal because of a retention or other disposition of termination inventory until 10 days after the date of retention or disposition, or a later date determined by the City because of the circumstances.
- m) Unless otherwise provided for in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this Contractor three years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the City, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the City, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

# STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION CHART FOR DETERMINING NUMBER OF CONTRACT DAYS

**FOR INFORMATION ONLY**DATE: SAMPLE

PREPARED BY: C. Gandza (City of New Britain))

REVIEWED BY: R. Trottier, PE (City of New Britain)

DATE: 6/8/2016

6/8/2016

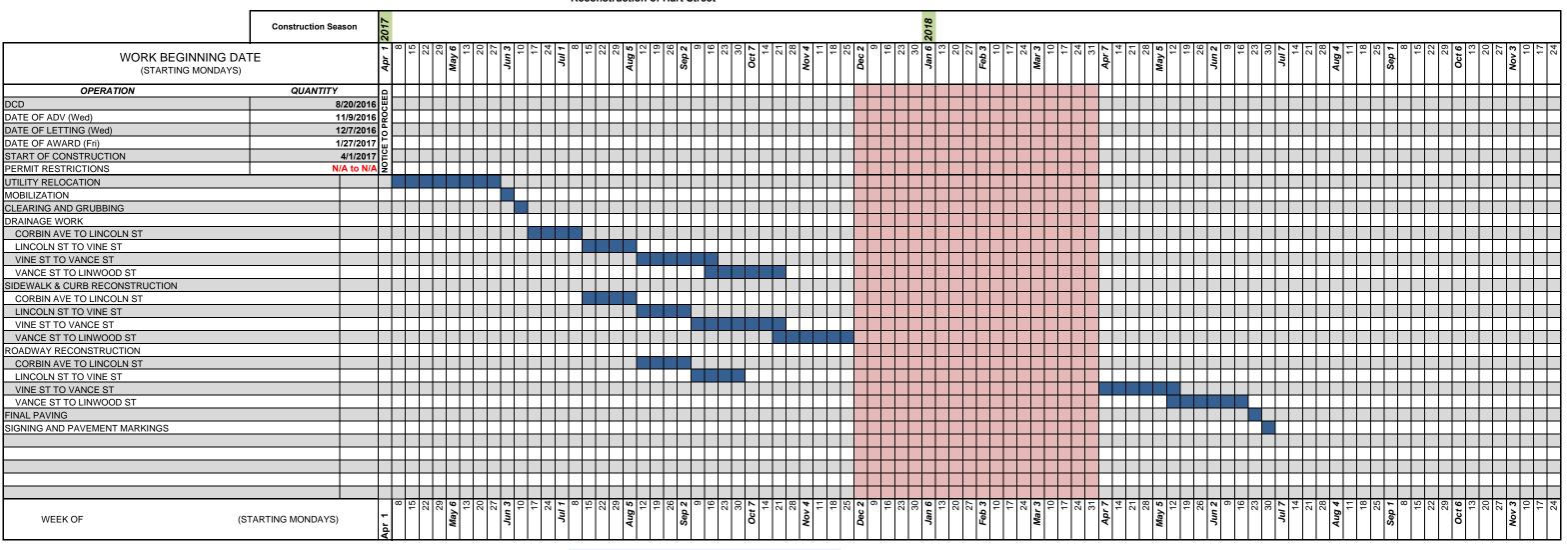
DATE:

CALENDAR WEEKS

WINTER SHUTDOWN (DEC. 1 to Mar. 31)

 FEDERAL AID PROJECT NO.
 1088(110)
 TOWN
 New Britain
 PROJ. NO.
 088-185

Reconstruction of Hart Street



## INDEX TO SPECIAL PROVISIONS

#### 088-185 RECONSTRUCTION OF HART STREET

Rev. 11/07/2016

Notice To Contractor - City Of New Britain Disclaimer

Notice To Contractor - Technical Specifications

Notice To Contractor - Special Provisions

Notice To Contractor - Federal Wage Determinations (Davis Bacon Act)

Notice To Contractor - Contractor Training Requirement For 10-Hour OSHA Construction Safety

And Health Course

Notice To Contractor - Procurement of Materials

Notice To Contractor - Requirements of Title 49, Code Of Federal Regulations Part 26

Notice To Contractor - Bidrigging and/or Frauds

Notice To Contractor - Vehicle Emissions

Notice To Contractor - Section 4.06 and Mix Designation Equivalency and PG Binder

Equivalency

Notice To Contractor - Superpave Design Level Information

Notice To Contractor - Sequence of Operations

Notice To Contractor - Fire Department, Police & Emergency Medical Services

Notice To Contractor - Sign Inventory

Notice To Contractor - Safeguarding of Residences and Commercial Properties

Notice To Contractor - Noise Pollution

Notice To Contractor - Permits

Notice To Contractor - Protection of Underground Utilities

Notice To Contractor - Utility Coordination

Notice To Contractor - Utility Generated Schedule

Notice To Contractor - Water Usage Fee

Notice To Contractor - List of Contacts of Utility Personnel

Notice To Contractor - Utility Generated Schedule Notice To Contractor - Salvageable Materials

Notice To Contractor - Unanticipated Discovery of Cultural Resources

Section 01.05 - Control of the Work

Section 01.07 - Legal Relations and Responsibilities

Section 01.08 - Prosecution and Progress

088-185

# **INDEX TO SPECIAL PROVISIONS**

# **088-185 RECONSTRUCTION OF HART STREET**

0202003A	_	Earth Excavation
0202120A	_	Rock Excavation (No Explosives)
0202351A	_	Unsuitable Material Excavation
0202451A	_	Test Pit Excavation
0202503A	_	Removal of Concrete Curbing
0213011A		Granular Fill
0304002A	_	Processed Aggregate Base
0406999A	-	Asphalt Adjustment Cost
0507001A	-	Type "C" Catch Basin
0507004A	-	Remove Catch Basin/Manhole
0507022A	-	Type "C" Catch Basin Double Grate - Type II
0507048A	-	Type "C" C.B. Without Sump
0507201A	-	Type "C-L" Catch Basin
0507601A	-	Manhole
0507685A	-	Manhole - 6' Diameter
0651012A	-	15" R.C. Pipe
0651013A	-	18" R.C. Pipe
0651015A	-	24" R.C. Pipe
0651743A	-	6" Polyvinyl Chloride Pipe
0651746A	-	12" Polyvinyl Chloride Pipe
0811001A	-	Concrete Curbing
0811002A	-	Special Concrete Curbing
0921001A	-	Concrete Sidewalk
0924006A	-	Concrete Driveway Ramp
0924007A		Concrete Driveway Ramp-Commercial
0949000A	-	Wood Chip Mulch
0949131A	-	Syringa Reticulata, "Ivory Silk" Japanese Tree Lilac 3"- 3 1/2" CAL. B.B.
0949146A		Quercus Rubra, Northern Red Oak, 3" – 3 ½" CAL. B.B.
0949164A		Malus "Red Jewel", Red Jewel Crabapple 3" – 3 ½" CAL. B.B.
0949165A		Carya Ovata, Shagbark Hickory, 3" – 3 ½" CAL. B.B.
0949356A		Prunus Serrulata Kwanzan Cherry 3" – 3 ½" CAL. B.B.
0949446A	-	Buxus Sempervirens, "American Boxwood" Classic, 3 Gallon Container
0949834A		Acer Rubrum Red Maple 3"- 3 ½" CAL. B.B.
0949852A	-	1
0950005A	-	Turf Establishment
0952001A		Selective Clearing and Thinning
0969062A		Construction Field Office (Medium)
0971001A		Maintenance and Protection of Traffic
0974001A		Removal of Existing Masonry
0981101A		Opposing Traffic Lane Divider
1206023A		Removal and Relocation of Existing Signs
1208932A		Sign Face Sheet Aluminum (Type IV Retroreflective Sheeting)
1302054A		Replace Curb Box
1303195A		Remove Hydrant (Water Main)
1303204A		Hydrant Assembly (Water Main)
1403501A		Reset Manhole (Sanitary Sewer)
1700001A	-	Service Connections (Estimated Cost)

088-185 INDEX

## NOTICE TO CONTRACTOR- CITY OF NEW BRITAIN DISCLAIMER

City of New Britain bidding and other information and documents which are obtained through the Internet, World Wide Web Sites or other sources are not to be construed to be official information for the purposes of bidding or conducting other business with the Town.

It is the responsibility of each bidder and all other interested parties to obtain all bidding related information and documents from official sources within the City.

Persons and/or entities which reproduce and/or make such information available by any means are not authorized by the City to do so and may be liable for claims resulting from the dissemination of unofficial, incomplete and/or inaccurate information.

088-185 GENERAL

#### NOTICE TO CONTRACTOR- TECHNICAL SPECIFICATIONS

The material and construction methods for the work specified in this contract shall conform with the applicable provisions of the State of Connecticut, Department of Transportation specification entitled <u>Standard Specifications for Roads, Bridges and Incidental Construction, Form 816</u>, Dated 2004, Last Revised January 2016 and the Special Provisions contained in the Contract Documents. <u>Standard Specifications for Roads, Bridges and Incidental Construction, Form 816</u> and all subsequent revisions, <u>Supplemented Form 816</u>, <u>January 2016</u> are hereby made part of this contract. "Form 816" and Supplemental Forms may be purchased from:

Connecticut Department of Transportation, Plan Sales Office 160 Pascone Place Newington, Connecticut 06111

or may be viewed at the State of Connecticut, Department of Transportation's web site at http://www.ct.gov/dot

All references to Commissioner, Department, Engineer, and State anywhere with the Contract Documents and Form 816 shall be interpreted to mean the City of New Britain or a duly authorized agent of the City. Any questions or ambiguity regarding any definitions shall be brought to the immediate attention of the City.

## NOTICE TO CONTRACTOR- SPECIAL PROVISIONS

The following Special Provisions are hereby incorporated and made part of this contract. Should a conflict occur between the City of New Britain requirements and the State of Connecticut requirements, the requirements of the State shall apply in all cases. Standard Specifications for Roads, Bridges and Incidental Construction, Form 816, shall govern followed by the City of New Britain Standard Specifications for Municipal Construction, Dated May 2008, Revised July 2014. The New Britain Standard Specifications for Municipal Construction are available on the web under the Public Works link at <a href="www.newbritainct.gov">www.newbritainct.gov</a>. See Section 27 in the Instructions to Bidders regarding conflicting provisions within the Bid Documents and/or the executed Contract.

088-185 GENERAL

### 1. Notification of Anticipated Start Date

The Contractor shall notify the City of New Britain inspector assigned to the project, or if the Contractor is not aware of an inspector being assigned, the City Engineer, at (860) 826-3350, a minimum of five (5) working days prior to commencing work on the project.

# 2. City Requirements Not Waived

Failure to include any specification requirement of the City of New Britain from the Contract Documents shall not be construed as reason to waive or eliminate the requirement from applying to work performed under this contract.

#### 3. Record of Preconstruction Conditions

The Contractor shall furnish to the Engineer photographs and videos of the Project Site and immediate surrounding areas as specified below, no separate payment shall be made for this work:

#### A. PHOTOGRAPHS

- 1. Prior to the start of construction the Contractor, together with the City Inspector, shall digitally photograph the project to document existing conditions, special care items and critical areas. Special attention should be paid to areas where construction is anticipated on private property, areas along the entire Project Site boundary, and any features (e.g. walls, fences, structures, driveways, landscaping, trees, poles, architectural features, etc.) near or within the Project Site which will or may be affected by Project activities. The photographs should be taken from various locations and perspectives throughout the project area so as to provide a maximum coverage of the area.
- 2. After the completion of the project the Contractor, together with the City Inspector, shall digitally photograph the project to show completed work. The photographs should be taken from approximately the same locations and perspectives as those taken prior to construction.

#### B. VIDEOS

1. A narrated digital video of the Project Site and its immediate surrounding areas shall be taken prior to construction, with the date, time and locations clearly defined in the film. This video shall also be taken in the presence of the City Inspector. Special attention should be paid to areas where construction is anticipated on private property, areas along the entire Project Site boundary, and any features (e.g. walls, fences, structures, driveways, landscaping, trees, poles, architectural features, etc.) near or within the Project Site which will or may be affected by Project activities.

2. A narrated digital video of the Project Site and its immediate surrounding areas taken after construction, with the date, time and locations clearly defined in the film.

The videos content (locations, perspective, sequence, etc.) should essentially replicate that of the pre-construction video.

Pre-construction project photograph and video files shall be delivered to the Engineer prior to commencing any construction; and the post-construction project photograph and video files shall be delivered to the City with the final payment requisition. The photographer(s) should consult with the Project Inspector prior to shooting regarding any particular locations, perspectives, and/or features the Project Inspector may wish to have recorded.

### 4. Project Surveyor

Prior to commencement of any Project construction, the Contractor shall submit to the Engineer the name, place of professional employment, business address and phone number, and license number of a licensed land surveyor in the State of Connecticut whose services have been retained by the Contractor to serve as Project Surveyor. The duties and responsibilities of the Project Surveyor shall include construction layout (Article 9 of the Supplemental General Conditions [SGC]), locating and verifying all existing survey and property monuments and markers prior to commencement of construction, establishment or re-establishment of survey and property monuments and markers, and data gathering for and preparation of record drawings (e.g. As-built drawings).

The Project Surveyor shall perform or **directly** supervise the performance of all such duties and responsibilities; and the Engineer has the authority to verify such supervision and to halt construction for reason of lack of property supervision if the level of such supervision is not satisfactory.

Prior to Final Acceptance of any portion of the project, As-built drawings of that portion of the project, prepared at the Contractor's expense by the Project Surveyor in accordance with the latest revision of the City of New Britain Requirements for As-built Maps, must be submitted to, and approved by, the Engineer. As-built data is to be clearly and legibly recorded, under the supervision of the Project Surveyor, as the work progresses. As-built data for any, or all, completed work must be made available to the Engineer for review upon demand.

The designated Project Surveyor may not be changed without valid cause and written approval from the Engineer. In order to change the designated Project Surveyor, the Contractor must submit, in writing, to the Engineer, the reason for the desired change, along with all pertinent information required regarding the proposed replacement Project Surveyor. The Engineer retains the right to contact and obtain information from the Project Surveyor regarding his functioning in such capacity on the Project and the Contractor's proposal to relieve him of such duties.

# NOTICE TO CONTRACTOR – FEDERAL WAGE DETERMINATIONS (Davis Bacon Act)

The following Federal Wage Determinations are applicable to this Federal- Aid contract and are hereby incorporated by reference. During the bid advertisement period, it is the bidder's responsibility to obtain the latest Federal wage rates from the US Department of Labor website, as may be revised 10 days prior to bid opening. Any revisions posted 10 days prior to the bid opening shall be the wage determinations assigned to this contract.

Check Applicabl e WD# (DOT Use Only)	WD#	Construction Type	Counties
	CT1	Highway	Fairfield, Litchfield, Middlesex, New Haven, Tolland, Windham
	CT2	Highway	New London
X	CT3	Highway	Hartford
	CT5	Heavy Dredging (Hopper Dredging)	Fairfield, Middlesex, New Haven, New London
	CT6	Heavy Dredging	Statewide
	CT13	Heavy	Fairfield
	CT14	Heavy	Hartford
	CT15	Heavy	Middlesex, Tolland
	CT16	Heavy	New Haven
	CT17	Heavy	New London
	CT26	Heavy	Litchfield, Windham
	CT18	Building	Litchfield
	CT19	Building	Windham
	CT20	Building	Fairfield
	CT21	Building	Hartford
	CT22	Building	Middlesex
	CT23	Building	New Haven
	CT24	Building	New London
	CT25	Building	Tolland
	CT4	Residential	Litchfield, Windham
	CT7	Residential	Fairfield
	CT8	Residential	Hartford
	CT9	Residential	Middlesex
	CT10	Residential	New Haven
	CT11	Residential	New London
	CT12	Residential	Tolland

The Federal wage rates (Davis-Bacon Act) applicable to this Contract shall be the Federal wage rates that are current on the US Department of Labor website (<a href="http://www.wdol.gov/dba.aspx">http://www.wdol.gov/dba.aspx</a>) as may be revised 10 days prior to bid opening. The Department will no longer physically include revised Federal wage rates in the bid documents or as part of addenda documents. These applicable Federal wage rates will be incorporated in the final contract document executed by both parties.

If a conflict exists between the Federal and State wage rates, the higher rate shall govern.

To obtain the latest Federal wage rates, go to the US Department of Labor website (link above). Under Davis-Bacon Act, choose "Selecting DBA WDs" and follow the instruction to search the latest wage rates for the State, County and Construction Type.

# NOTICE TO CONTRACTOR – CONTRACTOR TRAINING REQUIREMENT FOR 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE

In accordance with Connecticut General Statute 31-53b and Public Act No. 08-83, the Contractor is required to furnish proof that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53, has completed a course of at least ten hours in duration in construction safety and health approved by the Federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

Proof of compliance with the provisions of the statute shall consist of a student course completion card issued by the federal Occupational Safety and Health Administration, or other such proof as deemed appropriate by the Commissioner of the Connecticut Department of Labor, dated no earlier than five years prior to the commencement of the project. Each employer shall affix a copy of the construction safety course completion card for each applicable employee to the first certified payroll submitted to the Department of Transportation on which the employee's name first appears.

Any employee required to complete a construction safety and health course as required that has not completed the course, shall have a maximum of fourteen (14) days to complete the course. If the employee has not been brought into compliance, they shall be removed from the project until such time as they have completed the required training.

This section does not apply to employees of public service companies, as defined in section 16-1 of the 2008 supplement to the General Statutes, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

The internet website for the federal Occupational Safety and Health Training Institute is <a href="http://www.osha.gov/fso/ote/training/edcenters">http://www.osha.gov/fso/ote/training/edcenters</a>.

Additional information regarding this statute can be found at the Connecticut Department of Labor website, <a href="http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm">http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm</a>.

Any costs associated with this notice shall be included in the general cost of the contract. In addition, there shall be no time granted to the contractor for compliance with this notice. The contractor's compliance with this notice and any associated regulations shall not be grounds for claims as outlined in Section 1.11 – "Claims".

# NOTICE TO CONTRACTOR - PROCUREMENT OF MATERIALS

Upon award, the Contractor shall proceed with shop drawings, working drawings, procurement of materials, and all other submittals required to complete the work in accordance with the contract documents.

# NOTICE TO CONTRACTOR - REQUIREMENTS OF TITLE 49, CODE OF FEDERAL REGULATIONS PART 26

The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

# **NOTICE TO CONTRACTOR - BIDRIGGING AND/OR FRAUDS**

The Connecticut Department of Transportation is cooperating with the U.S. Department of Transportation and the Justice Department in their investigation into highway construction contract bidrigging and/or frauds.

A toll-free "HOT LINE" telephone number 800-424-9071 has been established to receive information from contractors, subcontractors, manufacturers, suppliers or anyone with knowledge of bidrigging and/or frauds either past or current. The "HOT LINE" telephone number will be manned during normal working hours (8 A.M. - 5 P.M. EST.), and information will be treated confidentially and anonymity respected.

# NOTICE TO CONTRACTOR - VEHICLE EMISSIONS

All motor vehicles and/or construction equipment (both on-highway and non-road) shall comply with all pertinent State and Federal regulations relative to exhaust emission controls and safety.

The contractor shall establish staging zones for vehicles that are waiting to load or unload at the contract area. Such zones shall be located where the emissions from the vehicles will have minimum impact on abutters and the general public.

Idling of delivery and/or dump trucks, or other equipment shall not be permitted during periods of non-active use, and it should be limited to three minutes in accordance with the Regulations of Connecticut State Agencies Section 22a-174-18(b)(3)(c):

No mobile source engine shall be allowed "to operate for more than three (3) consecutive minutes when the mobile source is not in motion, except as follows:

- (i) When a mobile source is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control,
- (ii) When it is necessary to operate defrosting, heating or cooling equipment to ensure the safety or health of the driver or passengers,
- (iii) When it is necessary to operate auxiliary equipment that is located in or on the mobile source to accomplish the intended use of the mobile source,
- (iv) To bring the mobile source to the manufacturer's recommended operating temperature,
- (v) When the outdoor temperature is below twenty degrees Fahrenheit (20 degrees F),
- (vi) When the mobile source is undergoing maintenance that requires such mobile source be operated for more than three (3) consecutive minutes, or
- (vii) When a mobile source is in queue to be inspected by U.S. military personnel prior to gaining access to a U.S. military installation."

All work shall be conducted to ensure that no harmful effects are caused to adjacent sensitive receptors. Sensitive receptors include but are not limited to hospitals, schools, daycare facilities, elderly housing and convalescent facilities. Engine exhaust shall be located away from fresh air intakes, air conditioners, and windows.

A Vehicle Emissions Mitigation plan will be required for areas where extensive work will be performed in close proximity (less than 50 feet (15 meters)) to sensitive receptors. No work will proceed until a sequence of construction and a Vehicle Emissions Mitigation plan is submitted in writing to the Engineer for review and all comments are addressed prior to the commencement of any extensive construction work in close proximity (less than 50 feet (15 meters)) to sensitive receptors. The mitigation plan must address the control of vehicle emissions from all vehicles and construction equipment.

If any equipment is found to be in non-compliance with this specification, the contractor will be issued a Notice of Non-Compliance and given a 24 hour period in which to bring the equipment into compliance or remove it from the project. If the contractor then does not comply, the Engineer shall withhold all payments for the work performed on any item(s) on which the non-conforming equipment was utilized for the time period in which the equipment was out of compliance.

Any costs associated with this "Vehicle Emissions" notice shall be included in the general cost of the contract. In addition, there shall be no time granted to the contractor for compliance with this notice. The contractor's compliance with this notice and any associated regulations shall not be grounds for claims as outlined in Section 1.11 – "Claims".

# NOTICE TO CONTRACTOR - SECTION 4.06 AND M.04 MIX DESIGNATION EQUIVALENCY AND PG BINDER EQUIVALENCY

Sections 4.06 and M.04 have been replaced in their entirety with the Special Provisions included as part of this contract. These Special Provisions reflect changes in mix designations for various types of hot-mix asphalt (HMA) and include the removal of mixes designed and governed by the Marshall Mix Design method. The following table is to be used to associate mix designations noted on the plans with those in the contract specifications and related documents. Mix designations on each row are equivalent and refer to a single mix, which shall be subject to the requirements of the Section 4.06 and M.04 Special Provisions for the Official Mix Designation in the leftmost column of the corresponding row in the table.

### **Mix Designation Equivalency Table**

Official Mix Designation	<b>Equivalent Mix</b>	Equivalent Mix
	Designation (a)	Designation (b)
(c)	Superpave 1.5 inch	Superpave 37.5 mm
HMA S1	Superpave 1.0 inch	Superpave 25.0 mm
HMA S0.5	Superpave 0.5 inch	Superpave 12.5 mm
HMA S0.375	Superpave 0.375 inch	Superpave 9.5 mm
HMA S0.25	Superpave 0.25 inch	Superpave 6.25 mm
(c)	Superpave #4	Superpave #4
HMA S0.5 (d)	Bituminous Concrete Class 1 (e)	Bituminous Concrete Class 1 (e)
HMA S0.375 (d)	Bituminous Concrete Class 2 where it is specified in lifts 1.25 or thicker (e)	Bituminous Concrete Class 2 where it is specified in lifts 1.25 or thicker (e)
HMA S0.25 (d)	Bituminous Concrete Class 2 where it is specified in lifts 1.0 inches to less than 1.25 inches (e); Bituminous Concrete Class 12 (e)	Bituminous Concrete Class 2 where it is specified in lifts 1.0 inches to less than 1.25 inches (e); Bituminous Concrete Class 12 (e)
HMA S1 (d)	Bituminous Concrete Class 4 (e)	Bituminous Concrete Class 4 (e)
Curb Mix	Bituminous Concrete Class 3	Bituminous Concrete Class 3

#### **Notes**

(a) This mix designation is generally included with projects where the English measurement system is used. The mix designation may contain both the English measurement system

designation and the SI (metric) measurement system designation, one of which would be in parenthesis.

- **(b)** This mix designation is generally included with projects where the SI (metric) measurement system is used. The mix designation may contain both the English measurement system designation and the SI measurement system designation, one of which would be in parenthesis.
- (c) This mix is no longer in use except by contract-specific Special Provision; if this mix is called for in the Plans but no such Special Provision is included for this contract a suitable substitute must be approved by the Engineer.
- (d) Unless approved by the Engineer, the Superpave Design Level for the Official Mix Designation bituminous concrete replacing a Marshall mix called for in the plans or other contract documents shall be Design Level 2 for mixes used on mainline or shoulders of statemaintained roadways and Design Level 1 elsewhere, including but not limited to driveways or sidewalks.
- (e) All mixes designed under the Marshall mix-design method are no longer covered by the 4.06 Special Provision. Wherever they appear in Contract plans and documents they shall be substituted by the "Official Mix Designation" in the same row of the Mix Designation Equivalency Table. Unless approved by the Engineer, the Superpave Design Level shall be Level 1.

# **PG Binder Designation Equivalency Table**

Official Binder Designation	Equivalent Binder Designation	Use
PG 64S-22	PG 64-22	Hot-Mix Asphalt
		(HMA S* pay items
		and pay items using
		HMA S*
		materials)(a),(b)
PG 64E-22	PG 76-22	Polymer-Modified
		Asphalt (PMA S* pay
		items and pay items
		using HMA S*
		materials)(a),(b)

#### **Notes**

- (a) Use the Mix Designation Equivalency Table above to identify the Official Mix Designation for materials using the Marshall mix design method, i.e. "Bituminous Concrete Class \*."
- **(b)** Refer to the NTC Superpave Design Level for the Superpave Design Level to use for each mix on a project. The PG Binder Designation Equivalency Table can be used to obtain the Official Binder Designation for each mix identified in the NTC Superpave Design Level.

# **NOTICE TO CONTRACTOR - SUPERPAVE DESIGN LEVEL INFORMATION**

Hot-Mix Asphalt (HMA) and Polymer-Modified Asphalt (PMA) constructed according to the Superpave mix-design system are required to attain a Superpave Design Level and are required to use a Performance Graded (PG) binder. The Superpave Design Levels required for this project are listed in Table 1. The required PG binder is indicated for each mix with an "X" in the appropriate box in Table 1.

TABLE 1 – Superpave Design Level and Performance Graded (PG) Binder

Mix Designation	PG Binder		Hart Street	Route	Route	Route	Route
	PG 64S-22	PG 64E-22	Design Level	Design Level	Design Level	Design Level	Design Level
HMA S0.25	-	-	-	-	-	-	-
HMA S0.375	-	-	-	-	-	-	-
HMA S0.5	X	-	2	-	-	-	-
HMA S1	-	-	-	-	-	-	-
PMA S0.25	-	-	-	-	-	-	-
PMA S0.375	-	-	-	-	-	-	-
PMA S0.5	-	-	-	-	-	-	-
PMA S1	-	-	_	-	-	_	_

Note: Please note that PMA mix designations typically use PG 64E-22 and HMA mix designations use PG 64S-22

# **NOTICE TO CONTRACTOR - SEQUENCE OF OPERATIONS**

The Reconstruction of Hart Street shall be split into phases. Construction activities will be limited to reduce impact to the public and businesses located within and adjacent to the project area. Limitations are identified in the contract special provisions. The Contractor is required to submit a schedule and sequence of operations to the Engineer for approval a minimum of four (4) weeks prior to commencing construction activities.

# NOTICE TO CONTRACTOR - FIRE DEPARTMENT, POLICE & EMERGENCY MEDICAL SERVICES

The Contractor shall contact the Fire Department, Police and Emergency Medical Services, prior to work impacting local streets and establish coordination necessary as to disruption of services during construction.

# NOTICE TO CONTRACTOR - SIGN INVENTORY

Prior to the commencement of construction, the Contractor and the Engineer shall conduct a joint inventory of signs, delineators and object markers. Signs, delineators or object markers that are knocked down or destroyed by the Contractor during the construction of the project shall be replaced by the Contractor at no cost to the City.

# NOTICE TO CONTRACTOR – SAFEGUARDING OF RESIDENCES AND COMMERCIAL PROPERTIES

The Contractor shall maintain and protect traffic operations at all driveways and provide adequate sightline. The Contractor shall not restrict sightline with construction equipment when not actively working. The Contractor shall also safeguard pedestrian operation and maintain access to properties at all times.

# NOTICE TO CONTRACTOR – NOISE POLLUTION

The Contractor shall take measures to control the noise intensity caused by his construction operations and equipment, including but not limited to equipment used for drilling, pile driving, blasting, excavation or hauling.

All methods and devices employed to minimize noise shall be subject to the continuing approval of the Engineer and in accordance with the City of New Britain Ordinance Article V. Noise, Sec. 16-103-(16) & (17), Sec. 16-104-(7) (9) & (10). The maximum allowable level of noise at the nearest residence or occupied building shall be 90 decibels on the "A" weighted scale (dBA). Any operation that exceeds this standard will cease until a different construction methodology is developed to allow work to proceed within the 90 dBA limit.

# **NOTICE TO CONTRACTOR - PERMITS**

The Contractor shall obtain all necessary city permits including but not limited to sidewalk, curb and road opening.

# NOTICE TO CONTRACTOR - PROTECTION OF UNDERGROUND UTILITIES

The Contractor is hereby instructed to follow established "Call Before You Dig" procedures.

The Contractor is hereby advised that placement of heavy equipment and materials or the traversing of heavy construction equipment over underground utilities which might be damage utility shall be reviewed and approved by the Engineer.

The Contractor shall consider in his/her bid any inconvenience and work required for this condition. The work to repair or replace any damage caused by the Contractor's operations will be made solely at the Contractor's expense.

# NOTICE TO CONTRACTOR - UTILITY COORDINATION

In addition to the requirements of the Supplemental General Conditions Section 15, Existing Underground Utilities, Protection, and Responsibility, the Contractor is advised of the following Utility coordination items.

The Contractor will be responsible for the protection and support of utilities within the project limits. The Contractor is responsible for the design, method and manner of installations of temporary supports, if needed. The design for temporary supports must be submitted to the Engineer for review and approval.

The Contractor is hereby advised that upon issuance of the notice to proceed, the Contractor shall immediately coordinate the installation of all utilities, and develop a schedule for construction that accommodates each utility installation without negatively impacting the overall project schedule. Items specific for the project utility companies include:

- New Britain Water Department coordinate inspection of new fire hydrants
- Eversource coordinate utility pole relocation
- Connecticut natural Gas coordinate inspection of gate boxes

The Contractor shall install all proposed utilities while maintaining existing utility services live at all times. In addition the Contractor shall stake out the proposed construction survey base line and provide bench marks for any utility company requiring this service for their use in relocation of their facility. The cost of this service shall be included in the bid item for "Construction Staking".

#### **ALL UTILITIES**

The Contractor shall coordinate construction activities with the utility companies and develop a construction schedule accordingly. The contractor is advised that his operations and road construction work may be significantly impacted until the utility companies have completed their proposed utility work. The Contractor should note that he will be required to reset casting of any utility work constructed and completed by others prior to the Contractor performing his work at any location within the project limits to final grade.

# NOTICE TO CONTRACTOR - WATER USAGE FEE

The New Britain Water Department shall charge the contractor for a water usage permit for each 6 month period or partial period beginning January to June and July to December for their usage of water throughout the duration of the project until completion.

# NOTICE TO CONTRACTOR - LIST OF CONTACTS OF UTILITY PERSONNEL

Prior to the commencement of construction, the Contractor shall contact, coordinate and maintain close liaison with the following Utility Companies:

City of New Britain Director, Department of Public Works	Mark E. Moriarty	(860) 826-3350
City of New Britain City Engineer	Robert Trottier	(860) 826-3355
New Britain Water Department	Gilbert J. Bligh	(860) 826-3535
Eversource Energy Electric Distribution	Barry C. Lashley	(203) 245-5208 x3568
Frontier Communications of CT	Raymond W. Puzemis	(203) 238-7407
Connecticut Natural Gas Corp. (CNG)	Vasant C. Patel	(860) 727-3114
Comcast of Connecticut, Inc.	Richard Frey	(860) 505-1122

# **NOTICE TO CONTRACTOR**

#### UTILITY GENERATED SCHEDULE

The attached project specific utility work schedules were provided to the City of New Britain by the respective utility companies regarding their identified work on this project.

The utility scheduling information is provided to assist the Contractor in scheduling its activities. However, the Department does not ensure its accuracy and Section 1.05.06 of the Standard Specifications still is in force.

The utility scheduling information shall be incorporated into the Contractor's pre-award schedule in accordance with the Department's Bidding and Award Manual and Section 1.05.08 of the Contract.

After award, the Contractor shall conduct a utility coordination meeting or meetings to obtain contemporaneous scheduling information from the utilities prior to submitting its baseline schedule to the Department in accordance with Section 1.05.08 of the Contract.

The Contractor shall incorporate the contemporaneous utility scheduling information into its baseline schedule submittal. The baseline schedule shall include Contractor predecessor and successor activities to the utility work in such detail as acceptable to the Engineer.

Connecticut Natural Gas has stated that gas main relocation work is scheduled to be complete by the end of September 2016.

		U	TILITY WO	ORK SCH	EDULE F	Rev 3/2015		
CTDOT Pr	oject Numbe		88-185		Town:	New Brita	in	
	escription:		ction of Hart	St				
CTDOT Ut	ilities Engine	er:	Xiuyun Cai					
Phone:	860-594-3	269			Email:	Xiu	uyun.Cai@ct.go	<b>/</b>
Utility Cor	mpany:	Eversource	Energy					
Prepared		Michael Pr			Date Pre	pared:	7/21/20	16
Phone:	203-271-4	<mark>794</mark>			Email:	michael.pr	entice@everso	ırce.cor
			Sc	ope of Wo	rk			
CDOT and Britain. T 18 inches	the Town on they have red behind the of the order	f New Britai quested that curb. These material 45	n have reque t when the re 6 poles do no days from CI	ested that E econstruction ot conform DOT grantion	versource on of Hart to this cr ng Everso	e move 6 pol	es along Hart St eted all poles mu vill schedule cre- sion to begin app	in New ust be ws to
The fellow	alacanthe e die e d	·	ecial Conside				a cattle	
restrictions o	n cut-overs, outa	ges, limitations o		ce interruption			ne utility work. For ex lays), seasonal and	ample,
		_	•				016 due to Ever	source
moratoriu	ım on taking	out circuit f	feeders from	June 1st to	Labor Da	ay.		

UTILITY WORK SCHEDULE Rev 3/2015						
CTDOT Project Numbe	r:	88-185				
Utility Company:	Eversource	!				
Prepared By:	Michael Pre	entice		Total Working Days:	10	

### Schedule

The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.

Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)
13+50 to 14+50	Replace Poles 45068 & 55348	Front of curb & front of sidewalk must be marked out.	2
33+50 to 35+00	Replace Poles 50699 & 50697	Front of curb & front of sidewalk must be marked out.	2
40+00	Replace Pole 45060	Front of curb & front of sidewalk must be marked out.	2
10+50	Replace Pole 45071 & replace UG Feeder cables to Man Hole 696	Front of curb & front of sidewalk must be marked out.	4

		U	TILITY WORK SCH	EDULE Re	v 3/2015	
CTDOT Pro	ject Numbe	er:	88-185	Town:	New Britain	
Project De	scription:	Reconstruc	ction of Hart St			
CTDOT Uti	lities Engine	er:	Mark Rohssler			
Phone:	860-883-6	026		Email:	Mark_Rohssler@comcast.com	
Utility Con	nnany:	Comcast				
Prepared E		Mark Rohs	clar	Date Prepa	ared: 8/9/2016	
Phone:	860-883-6		3101	Email:	Mark_Rohssler@comcast.com	
riione.	800-883-0	020	C C . M		Wark_Nonssier@comcast.com	
C II · ·		6 11	Scope of Wo			
					he CTDOT project. The narrative describes all	
					rk required by the project as well as any aduring the construction of the project.	
	cy mirascrascare	a work the demey	micendo en perioriming micini e			
Comcast to	o rebuild str	and and cab	ole and shift fiber on po	les relocate	d for above project. Work to	
					ting their system to the new poles	
		out and top o			, ,	
arrai de rripi.		or arrange	5.0. p 5.00.			
		Sp	ecial Considerations a	nd Constrai	nts	
_		=	•		rformance of the utility work. For example,	
		=	•	ns (e.g. nights, w	veekends, holidays), seasonal and	
environmentai	snutuown peri	ous, long lead m	aterial procurements, etc			
Eversource	will not he	able to beg	in work at note 45071	initl after La	ahor Day 2016 due to Eversource	
Eversource will not be able to begin work at pole 45071 unitl after Labor Day 2016 due to Eversource moratorium on taking out circuit feeders from June 1st to Labor Day.						
moratoriui	iii oii takiiig	out circuit i	eeders from Julie 1st t	J Labor Day	•	

UTILITY WORK SCHEDULE Rev 3/2015						
CTDOT Project Numbe	r:	88-185				
Utility Company:	Comcast					
Prepared By:	Mark Rohss	sler		Total Working Days:	10	

#### Schedule

The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.

Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)
13+50 to 14+50	Restrand,recable and resplice. Shift Fiber	Eversource Shift	3
33+50 to 35+00	Restrand, recable and resplice Shift Fiber	Eversource Shift	3
40+00	Restrand, recable and resplice Shift fiber	Eversource Shift	2
10+50	Restrand, recable and resplice Shift fiber	Eversource Shift	2

#### **UTILITY WORK SCHEDULE Rev 3/2015** CTDOT Project Number: Town: **New Britain** 88-185 Project Description: Hart Street Reconstruction CTDOT Utilities Engineer: Xiuyun Cai 860-594-3269 Email: Phone: Xiuyun.Cai@ct.gov **Utility Company: Frontier Communications** 7/29/2016 Prepared By: Marino Limauro Date Prepared: Phone: 203-771-3110 Email: marino.a.limauro@ftr.com

#### Scope of Work

The following is a description of all utility work planned to be completed in conjunction with the CTDOT project. The narrative describes all work to be carried out by the utility or its contractor, including temporary and permanent work required by the project as well as any additional utility infrastructure work the utility intends on performing within the project limits during the construction of the project.

State DOT Project #88-185. Hart Street reconstruction, New Britian, CT. Permanent relocation of seven Eversource poles will be required. Services to all existing Frontier customers will remain intact throughout this project. All right of way or easements (if required) will be provided by Conn DOT. The DOT or its contractor will provide all grades and must be within 6", property lines, taking lines, curb lines and sidewalks must be clearly marked in the field, the work area must be clear of all obstructions (material, equipment, etc...). 24 hour access is required without work hour restrictions. The DOT inspector will verify pole locations, and any tree trimming must be complete prior to setting poles. When the relocation of any private signs, lights or underground services is required they must be completed prior to the start of construction. Frontier will schedule its construction as its workload permits, the DOT will schedule other utilities attached to the pole line (Power Co., CATV, etc... and all State or Municipal owned cables or fixtures). Removal of existing poles and will be completed by Eversource once relocation of all utilities is complete.

#### **Special Considerations and Constraints**

The following describes the limiting factors that must be planned for in the scheduling and performance of the utility work. For example, restrictions on cut-overs, outages, limitations on customer service interruptions (e.g. nights, weekends, holidays), seasonal and environmental shutdown periods, long lead material procurements, etc..

Please note that any time frame given, Start Time, Duration of work can be affected by the DOT contractor, other utilities, permit applications (State or Municipality if required), changes in scope of work, inclement weather, storm recovery, Frontiers's workload, holidays and other emergency situations. This is a forecast of construction days required and is not intended to be a Schedule.

UTILITY WORK SCHEDULE Rev 3/2015						
CTDOT Project Number: 88-185						
Utility Company:	Frontier Communications					
Prepared By:	Marino Limauro	Total Working Days: 10				

### Schedule

The following schedule identifies each major activity of utility work in sequential order to be performed by the utility or its contractor. The location of each activity of work is identified by the baseline stationing on the CTDOT plans. All activities identify the predecessor activity which must be completed before a utility work activity may progress. The duration provided is the number of working days required to complete the utility work activity based on historical information and production rates.

Location (Station to Station)	Description of Utility Work Activity	Predecessor Activity	Duration (working days)
10+00 to 42+00	Attach existing cables to new poles	All utilities must be complete their shifting before Frontier can begin.	6
10+00 to 42+00	Attach loops to new poles		2
10+00 to 42+00	Adjust guying.		2

# NOTICE TO CONTRACTOR - SALVAGEABLE MATERIALS

The Contractor shall salvage the following materials:

ITEMS DESTINATIONS

Catch Basin Tops, Department of Public Works

Brick Pavers and 55 Harvard Street Sheet Aluminum Signs New Britain, CT

Tel. (860) 828-3480

Fire Hydrants New Britain Water Department

1000 Shuttle Meadow Avenue

New Britain, CT Tel. (860) 826-3536

The materials to be salvaged shall be delivered by the Contractor to the destination indicated above between the hours of 8:00 AM and 3:00 PM Monday through Friday, holidays excluded, after the proper notification has been made to the above Authorities.

All salvageable material shall be loaded, transported and unloaded by the Contractor.

The Contractor shall not receive payment for this work. The costs for loading, transporting and unloading of salvageable materials shall be included in the overall cost of this project.

# NOTICE TO CONTRACTOR – UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If historic properties are unexpectedly encountered during Project construction, the contractor will immediately cease all construction activities in the immediate vicinity that may reasonably be assumed to affect the historic properties. Any historic property discoveries shall to the extent possible be protected in situ to allow for consultation among the Parties and the Tribes. The historic properties may be preserved in situ or mitigated on a case-by-case basis in consultation with the Parties and the Tribes. No artifacts are to be removed from the site unless approved by all parties. Notwithstanding anything to the contrary herein, the curation and disposition of any cultural resources shall be consistent with 36 C.F.R. Part 79 and other applicable law. If human remains are unexpectedly encountered during Project construction, the remains will be treated in a respectful manner and in accordance with the respective laws of the State of Connecticut (Connecticut General Statutes Chapter 184a Section 10-388) and State of Connecticut Department of Transportation, Supp Form 816 January 2010 Abstract: Standard Specifications for Roads, <a href="https://www.ct.gov/dot/cwp/view.asp?a=1385&q=455784">https://www.ct.gov/dot/cwp/view.asp?a=1385&q=455784</a>.

# **SECTION 1.05 – CONTROL OF THE WORK**

Article 1.05.02 - Plans, Working Drawings and Shop Drawings: is supplemented as follows:

**Subarticle 1.05.02 -** (2) is supplemented by the following:

When required by the contract documents or when ordered by the City of New Britain or the Engineer, the Contractor shall prepare and submit sets of catalog cuts and or shop drawings to the municipality's contracting engineer for approval before fabrication. The packaged set of catalog cuts, working drawings and/or shop drawings shall be submitted in an electronic portable document format (.pdf). The electronic portable document format (.pdf) shall be in an individual file with appropriate bookmarks for each item. The electronic files for catalog cuts shall be created on ANSI A (8 ½" x 11", letter) sheets. Working drawings and shop drawings shall be created on ANSI B (11" x 17"; 279 mm x 432 mm; ledger/tabloid) sheets.

Catalog cuts shall be printed on ANSI A (8 ½" x 11", letter) sheets. Working drawings and shop drawings shall be printed on ANSI B (11" x 17", ledger/tabloid) sheets.

Please forward to City of New Britain Public Works Department:

Mr. Robert Trottier, P.E. City Engineer New Britain City Hall 27 West Main Street New Britain, Connecticut 06051 rtrottier@NewBritainCT.gov

# **SECTION 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES**

Delete Article 1.07.07 in its entirety and replace it with the following:

**1.07.07—Safety and Public Convenience:** The Contractor shall conduct the Project work at all times in such a manner as to ensure the least possible obstruction to traffic. In a manner acceptable to the Engineer, the Contractor shall provide for the convenience and interests of the general public; the traveling public; parties residing along or adjacent to the highway or Project Site; and parties owning, occupying or using property adjacent to the Project Site, such as commuters, workers, tenants, lessors and operating agencies.

Notwithstanding any other Contract provision, the Contractor shall not close to normal pedestrian or vehicular traffic any section of road, access drive, parking lot, sidewalk, station platform, railroad track, bus stop, runway, taxiway, occupied space within a Site, or occupied space within a building, except with the written permission of the Engineer.

All equipment, materials, equipment or material storage areas, and work areas must be placed, located, and used in ways that do not create a hazard to people or property, especially in areas open to public pedestrian or vehicular traffic. All equipment and materials shall be placed or stored in such a way and in such locations as will not create a hazard to the traveling public or reduce sight lines. In an area unprotected by barriers or other means, equipment and materials must not be stored within 30 feet of any traveled way.

The Contractor must always erect barriers and warning signs between any of its work or storage areas and any area open to public, pedestrian, or vehicular traffic. Such barriers and signs must comply with all laws and regulations, including any applicable codes.

The Contractor must arrange for temporary lighting, snow and ice removal, security against vandalism and theft, and protection against excessive precipitation runoff within its Project work and storage areas, and within other areas specifically designated in the Contract.

In addition to meeting the requirements of Section 9.71, the Contractor shall take all precautions necessary and reasonable for the protection of all persons, including, but not limited to, employees of the City of New Britain, and for the protection of property, until the Engineer notifies the Contractor in writing that the Project or the pertinent portion of the Project has been completed to the Engineer's satisfaction.

The Contractor shall comply with the safety provisions of applicable laws, including building and construction codes and the latest edition of the CFR. The Contractor must make available for reference in its field office, throughout the duration of the Project, a copy of the latest edition and all supplements of the CFR pertaining to OSHA.

The Contractor shall make available to the Contractor's employees, subcontractors, the Engineer, and the public, all information pursuant to OSHA 29 CFR Part 1926.59 and The Hazard Communication Standard 29 CFR 1910.1200, and shall also maintain a file on each job site containing all MSDS for products in use at the Project. These MSDS shall be made available to the Engineer upon request.

The Contractor shall observe all rules and regulations of the Federal, State, and local health officials. Attention is directed to Federal, State, and local laws, rules, and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to the worker's health or safety.

**Safety Plan:** Before starting work on the Project, the Contractor shall submit to the Engineer a written Safety and Health Plan (hereinafter referred to as the "Plan"). The Plan shall meet or exceed the minimum requirements of this Subsection and any applicable State or Federal regulations.

The Plan shall apply to any work under the Contract whether such work is performed, by way of example and not limitation, by the Contractor's forces, subcontractors, suppliers, or fabricators.

The Plan shall be prepared by the Contractor and submitted to the Engineer for review before the actual start of work on the Project. Within ten (10) calendar days of receipt, the Engineer will determine whether or not the Plan meets the requirements of this Specification. If the Plan does not meet the requirements of this Specification, it will be returned for revision. Work on the Project may not proceed until the Engineer has accepted the Plan. Nothing herein shall be construed, however, to relieve the Contractor from responsibility for the prosecution of the Project.

The Plan shall conform to the following general format:

#### 1. General Introduction.

- **a. Description.** The general introduction of the Plan shall include a statement by the Contractor describing its commitment to maintain a safe work environment for its employees, Department representatives, and the public. Implementation procedures and company policies relative to safety shall be summarized or referenced in the Plan.
  - i. The Plan shall include the names, addresses, and telephone numbers of the Contractor's Project Manager, Project superintendent and/or its designee for safety oversight, all competent persons, and the traffic control coordinator. Any changes to the safety management and oversight for the Project shall be promptly communicated to all concerned.
  - ii. The Plan shall provide guidelines for protecting all personnel from hazards associated with Project operations and activities.

- iii. The Plan shall establish the policies and procedures that are necessary for the Project to be in compliance with the requirements of OSHA and other State and Federal regulatory agencies with jurisdiction, rules, regulations, standards, or guidelines in effect at the time the work is in progress.
- **b.** Responsibility, Identification of Personnel, and Certifications. The Contractor is solely responsible for creating, implementing, and monitoring the Plan.
  - i. The Contractor shall identify and designate on-site supervisory level personnel who shall be responsible for implementing and monitoring the Plan at all times throughout the duration of the Project and shall have authority to take prompt corrective measures to eliminate hazards including the ability to stop work activities.
  - ii. Documentation of training provided to the on-site supervisory level personnel shall be included as part of the Plan.
  - iii. For any work activities wherein the Contractor has identified a competent person as defined by OSHA, that person shall be capable of identifying existing and predictable hazards and have the authority to take prompt corrective measures to eliminate the hazards, including the ability to stop work activities.
  - iv. Documentation of the qualifications of such competent persons identified, including any certifications received, shall be included as part of the Plan.
  - v. The Contractor shall further identify the qualified safety professional responsible for developing the Plan and shall provide that person's qualifications for developing the Plan which shall include, but not be limited to, education, training, certifications, and experience in developing this type of Plan.
  - vi. The Plan shall contain a certification executed by the qualified safety professional that developed the Plan, stating that the Plan complies with OSHA and other applicable State and Federal regulatory agencies with jurisdiction, rules, regulations, standards, or guidelines in effect at the time the work is in progress.
- 2. Elements of the Plan. The Plan shall address, but not be limited to, the following elements:
  - a. Management Safety Policy and Implementation Statement.
    - i. The Plan shall describe in detail the means by which the Contractor shall implement and monitor the Plan. Implementation and monitoring shall also mean that the Plan shall be a document with provision for change to update the Plan with new information on a yearly basis at a minimum and shall include new practices or procedures, changing site and environmental conditions, or other situations that could adversely affect site personnel. The Plan shall provide guidelines for protecting all personnel from hazards associated with Project operations and activities.
  - b. Emergency Telephone Numbers.
  - c. Personnel Responsibilities.
    - i. Management responsibilities
    - ii. Responsibilities of Supervisor(s)
    - iii. Site safety officer(s) responsibilities

- iv. Employee responsibilities
- v. Competent person(s) as defined by OSHA responsibilities

### d. Training.

- i. Regulatory
- ii. Documentation
- iii. Site hazard assessment -Daily employee awareness of site operations

### e. Safety Rules.

- i. General safety rules
- ii. Personal protective equipment
- iii. Housekeeping

### f. Safety Checklists.

- i. Project safety-planning checklist
- ii. Emergency plans and procedures checklist
- iii. Documentation checklist
- iv. Protective materials and equipment checklist

### g. Traffic Control Coordinator Inspections.

- i. Responsible person
- ii. Frequency
- iii. Documentation of actions taken

#### h. Record Keeping.

i. OSHA 200 log

#### i. Reporting.

- i. Accident(s)
- ii. On site
- iii. Legal notice requirement
- iv. Public liability
- v. Property damage
- vi. Department of Labor
- vii. Hazard Communications

### j. Additional Procedures for Project Specific Situations as Applicable.

- i. Compressed gas cylinders
- ii. Confined spaces
- iii. Cranes
- iv. Crystalline silica (stone, masonry, concrete, and brick dust)
- v. Electrical
- vi. Equipment operators
- vii. Fall protection
- viii. Hand and power tools
- ix. Hearing conservation
- x. Highway safety
- xi. Lead health and safety plan
- xii. Lock out/tag out
- xiii. Materials handling, storage, use, and disposal
- xiv. Areas of environmental concern

- xv. Night work
- xvi. Personal protective equipment
- xvii. Project entry and exit
- xviii. Respiratory protection
- xix. Sanitation
- xx. Signs, signals, and barricades
- xxi. Subcontractors
- xxii. Trenching
- **3.** Appendix for Environmental Health and Safety Plan (HASP). If environmental hazards are identified in the Contract, an Environmental HASP shall be included in an appendix to the Plan, or in a separate document. References to any Environmental HASP shall be included within the Plan, where appropriate.

The Plan shall be kept on the site and shall apply and be available to all workers and all other authorized persons entering the work site. Copies of all updates to the Plan shall be promptly supplied to the Engineer.

If at any time during the Project the Engineer determines that the Contractor is not complying with the requirements of this provision or the updated Plan, the Contractor shall correct such deficiencies immediately. Failure to remediate such deficiencies may result in suspension of the Contractor's operations until the deficiencies have been corrected. Suspensions ordered due to safety deficiencies will not be considered compensable or excusable delays.

The Contractor is responsible for implementation of the Plan. Pursuant to Article 1.07.10, the Contractor shall indemnify, and save harmless the State from any and all liability related to the Plan in proportion to the extent that the Contractor is held liable for same by an arbiter of competent jurisdiction.

The Contractor shall allow onto the Project site any inspector of OSHA or other legally responsible agency involved in safety and health administration upon presentation of proper credentials, without delay and without the presentation of an inspection warrant.

# 1.07.13—Contractor's Responsibility for Adjacent Property, Facilities and Services: supplement with the following:

The following company and representative shall be contacted by the Contractor to coordinate the relocation and/or protection of their utilities on this project 4 (four) weeks prior to the start of any work on this project involving their utilities:

City of New Britain- Director of Public Works	Mr. Mark E. Moriarty	(860) 826-3350	27 West Main Street 5th Floor New Britain, CT 06051
City of New Britain Water Department	Mr. Gilbert J. Bligh	(860) 826-3538	1000 Shuttle Meadow Ave. New Britain, CT 06052
Northeast Utilities Service Company	Mr. Stephen Klubnik	(860) 665-2473	107 Selden Street Berlin, CT 06037
United Cable Tele. Services Corp. dba Comcast Cable	Mr. Jim Bitzas	(617) 279-7485	19 Tuttle Place Middletown, CT 06457
SBC Southern New England Telephone dbaAT&T	Mr. Eric Clark	102031 238-7407	1441 North Colony Rd Meriden, CT 06450-4101
Connecticut Natural Gas Corporation	Mr. Vasant Patel	(860) 727-3114	76 Meadow Street 1st Floor E. Hartford, CT 06108

# **SECTION 1.08 - PROSECUTION AND PROGRESS**

## **Article 1.08.03 - Prosecution of Work -** Add the following:

Construction activities shall be performed in a manor to minimize impact to vehicular and pedestrian traffic operations. The Contractor shall submit a construction sequence to the Engineer for review and approval prior to the start of construction.

The Contractor shall limit his/her operations as follows:

- The Contractor shall limit his/her operations to one block or 1,000 linear feet of roadway (whichever is smaller)
- During roadway reconstruction, each section must be paved with the intermediate course of bituminous pavement prior to the end of the work week

The Contractor may formally request permission to work outside these limitations to the Engineer. If approval from the Engineer is granted, permission may be revoked at any time due to lack of protection of traffic, proper traffic pattern, poor traffic operations or other concerns.

### **Article 1.08.04 - Limitation of Operations - Add the following:**

In order to provide for traffic operations as outlined in the Special Provision "Maintenance and Protection of Traffic," the Contractor will not be permitted to perform any work which will interfere with the described traffic operations on all project roadways as follows:

#### HART STREET

The Contractor will not be allowed to perform any work that will interfere with existing traffic operations on:

- Monday through Friday between 12:00 A.M. (midnight) and 7:00 A.M. & between 3:00 P.M. and 12:00 A.M. (midnight)
- Saturday and Sunday
- All City holidays

An ADA compliant pedestrian route through the construction limits must be maintained and protected along at least one side of the street at all times.

Access to all properties and businesses must be maintained at all times unless prior arrangements are made with the property owners.

# VINE STREET

The Contractor will not be allowed to perform any work that will interfere with existing traffic operations on:

- Monday through Friday between 12:00 A.M. (midnight) and 7:00 A.M. & between 3:00 P.M. and 12:00 A.M. (midnight)
- Saturday and Sunday
- All City holidays

An ADA compliant pedestrian route through the construction limits must be maintained and protected along at least one side of the street at all times.

Access to all properties and businesses must be maintained at all times unless prior arrangements are made with the property owners.

# **All Other Roadways**

The Contractor will not be allowed to perform any work that will interfere with existing traffic operations on:

- Monday through Friday between 12:00 A.M. (midnight) and 7:00 A.M. & between 3:00 P.M. and 12:00 A.M. (midnight)
- Saturday and Sunday
- All City holidays

# **Other Limitations**

The field installation of a signing pattern shall constitute interference with one lane of traffic in each direction and shall not be allowed except during the allowable periods.

088-185 GENERAL

# <u>SECTION 1.09 – MEASUREMENT AND PAYMENT</u>

**Article 1.09.06 – Partial Payments** – replace in its entirety with the following:

#### 1.09.06 – Partial Payments:

# A. Monthly and Semi-monthly Estimates.

- (1) Once each month, the Engineer will make, in writing, current estimates of the value of work performed in accordance with the Contract, calculated at Contract unit prices, including but not limited to the value of materials complete in place and materials not yet incorporated into the Project, but approved by the Engineer for payment (as provided for elsewhere in this article). Five percent (5%) of the total amount determined by the Engineer will be deducted from the estimate and retained by the Department until the Engineer accepts the Project. The balance, less all previous payments, will be certified for payment. When work equaling the original Contract value has been accomplished, no additional retainage will be withheld. Exceptions may be made as follows:
  - (a) When not in conflict with the interests of the State, the Contractor may request, and the Engineer may make, semi-monthly estimates for payment. Semi-monthly estimates will be subject to the same retainage and payment conditions as are monthly estimates.
  - (b) No estimates for payments will be made when, in the judgment of the Engineer, the Project is not proceeding in accordance with the Contract, or when in his judgment the total value of the Project work done since the last estimate amounts to less than \$2,500 or 2% of the total bid amount, whichever is less.
  - (c) When Project work with a Contract value equal to at least 95% of the original Contract value has been completed, but prior to the Engineer's acceptance of the entire Project, the Commissioner may make additional payments which draw upon the funds held in retainage if he considers such payment to be in the best interests of the State.
- (2) The Engineer may also make payment at Contract unit prices for the number of units that represent the value of the Project work performed to date, if said Units are essentially, though not totally, complete.

088-185 GENERAL

# ITEM #0202003A EARTH EXCAVATION ITEM #0202120A ROCK EXCAVATION (NO EXPLOSIVES) ITEM #0202351A UNSUITABLE MATERIAL EXCAVATION

**2.02.01 -Description:** This work shall conform to the requirements of Section 2.02.01 of the CTDOT Standard Specifications, amended as follows.

#### Add to Classifications:

Unclassified Excavation shall be that excavation which is not classified by type of material or location. It shall include any and all Earth Excavation, Rock Excavation, Pavement Excavation, Pavement Surface Removal, Channel Excavation both rock and earth removed as indicated or as directed.

Unsuitable Material Excavation shall include all organic material, peat, organic silt or combinations thereof, all having unsatisfactory in-situ bearing properties removed as indicated on the plans or as directed by the engineer. The opinion of the Engineer shall be final and binding regarding the existence and extent of "Unsuitable Material."

**2.02.03 - Construction Methods**: This work shall conform to the requirements of Section 2.02.03 of the CTDOT Standard Specifications, amended as follows. Add the following to 4. Excavation of Rock:

Where a price for rock excavation has been bid and is applicable, only solid ledge rock, which required blasting, wedging or special tools for removal, and boulders which individually contain more than one cubic yard, will be paid for. Loose disintegrated rock, loose shale, nested stones, hardpan and the like will not be paid for. If there is any question as to whether any material should or should not be classed as rock, all said question must be referred to the Engineer for determination before the material is disturbed.

Due to the close proximity of utilities, including gas and water, in the project area, no blasting shall be permitted. The Contractor shall remove the rock by methods other than blasting, if necessary, in order to protect said utilities and their services from damage. Approved methods other than blasting are baring and wedging, jack hammer, rock jacks or other such hand or machinery methods which will not damage the adjacent utility.

Add the following to 5. Placement of Embankment:

All inorganic soils excavated from within the limits of excavation shall be considered suitable for the formation of embankments. However, if at the time of excavation these soils are wet and saturated, they shall be dried to a moisture content within 3% of the optimum moisture content as determined by AASHO T-99, Method C, prior to placing and compacting it. In order to attain this moisture content, the Contractor may have to stockpile this excavated material and allow it to dry. No additional compensation will be allowed for hauling such excavated material to and from stockpile areas or for any costs incurred in drying the excavated soil to the required moisture content.

ITEM #0202003A ITEM #0202120A ITEM #0202351A The Contractor may elect to supply and haul-in approved material rather than dry out excavated soils. No payment will be made for such material.

Add the following to 8. Surplus Excavated Material:

Excavated materials when suitable may be used as a substitute for materials to be supplied or furnished by the Contractor for use in other Items of work (such as topsoil, granular fill, etc.) subject to the following:

- Prior approval of the Engineer before its use as a substitute, and
- -A suitable credit, approved by the Engineer, has been given to the Owner for the amount substituted.

In no case, however, will any payment be made to the Contractor for other items made necessary by this substitution to replace materials required to complete the embankments or other items of work. The Contractor shall furnish at his own expense an amount of satisfactory material equivalent to that which the excavated material substituted and used in other items of work would occupy.

#### 2.02.04 - Method of Measurement:

This work shall conform to the requirements of Section 2.02.04 of the CTDOT Standard Specifications, with the following addition:

Payment lines for Unclassified Excavation shall coincide with the slope and subgrade lines or the top of payment lines for ditch excavation, whichever applies, as shown on the plans or as directed.

#### **2.02.05 - Basis of Payment:**

This work shall conform to the requirements of Section 2.02.05 of the CTDOT Standard Specifications, with the following additions:

Add "Unclassified Excavation" to the first sentence after the words ... "Rock Excavation (No Explosives),"...

<u>Pay Item</u>	<u>Pay Unit</u>
Earth Excavation	$\overline{\mathrm{CY}}$
Rock Excavation (No Explosives)	CY
Unsuitable Material Excavation	CY

#### ITEM # 0202451A - TEST PIT EXCAVATION

**2.05.01 – Description:** The work under this Item shall be the excavation of test pits by the Contractor where it may be necessary to locate or examine soils, groundwater, drains, pipes, rock, public utilities, subsurface structures, or any other obstacles or conditions. Unless otherwise specified or ordered by the Engineer, test pits will be dug by the Contractor.

This work shall consist of the satisfactory removal of all materials including water, within the limits of the test pit as necessary. This work shall also include the satisfactory stockpiling, disposal of surplus or unsuitable material, backfilling and compacting of the test pit with suitable material as approved by the Engineer. This work shall be done where shown on the Contractor Drawings or where directed or approved by the Engineer. All work shall be done in conformance with the Applicable Safety Code.

This work shall be done only at the request of the City of New Britain Engineer. It shall not be done at the discretion of the Contractor.

**2.05.03 - Construction Methods:** The Contractor shall coordinate the excavation of all test pits with the respective utility owners having facilities in the vicinity of the location of test pits. If so desired by the respective utility owners, all or part of the work under this item may be accomplished by their crews and/or supervised by them. All utilities have been informed of the necessity of work under this Item and the Contractor shall give sufficient notice to the respective utility owners to afford reasonable time for coordination.

Unless otherwise specified, the Contractor shall dig test pits where indicated on the Contract Drawings, and the Contractor shall notify the Engineer of the results at least 14 days prior to the start of any underground installations within said test pit area. The Contractor shall notify the Engineer and/or utility companies of any conflicts uncovered which may require design revisions, relocations and/or adjustment. No work shall be started within these areas of conflict until so authorized by the Engineer.

Test pit excavation and backfill shall comply with the applicable provisions of the Item "Trench Excavation" and shall have neat, clean cut and vertical sides. The Contractor shall measure and record the size, configuration, and exact horizontal and vertical location of all utilities, pipes or other obstacles uncovered in the various pits dug under this Item. The Engineer shall be notified well in advance of excavation so that he also may make the necessary measurements to locate all objects within test pits.

A. Excavation – Excavation of test pits shall be accomplished by such means as are required to ensure that underground utilities or structures as may be encountered are not damaged. It shall be the Contractor's sole responsibility of any damages incurred during the excavation operations. Any such damages shall be repaired or replaced by him (if permitted) to the satisfaction of the Owner/Responsible Agency/Engineer at the

088-185 ITEM #0202451A

Contractor's own expense. Where the repair and/or replacement must be done by the Owner/Responsible Agency any and all costs thereof shall be borne by the Contractor.

B. Where an existing pavement has been removed for the test pit excavation, the surface shall be restored to a condition equal or better than original as directed by the Engineer.

**2.05.04 - Method of Measurement:** Excavation for test pits will be measured for payment by the Engineer, and shall be the actual length, width and depth of the excavation within the limits ordered/approved by the Engineer. Water removed is never measured for payment.

Test pits will only be measured for payment where:

- a) The location of the pit is such that said pit will never be incorporated into any excavation being dug for proposed work under this Contract.
- b) The test pit will ultimately be within the limits of an excavation required for proposed work under this Contract, but said pit must be backfilled for safety or other reasons, as approved by the Engineer, prior to the excavation reaching the location of the pit. If any pit is not backfilled and subsequently incorporated into the excavation, said pit will not be measured for payment under the Item "Test Pit Excavation" but will be measured under the appropriate excavation item.

Test pits dug by the respective utility owner will not be measured for payment.

**2.05.05 - Basis of Payment:** Payment for the Test Pit Excavation shall be made at the contract unit price per cubic yard for "Test Pit Excavation", which price shall include the excavation of all materials as required. Included in the unit price bid for Test Pit Excavation will be excavation, sheeting, shoring, dewatering, backfill, compacting and the restoration of the surface of the "Test Pit Excavation" and all other materials, equipment, tools, labor and work incidental to or necessary for the completion of the Item.

The restoration of any pavement surfaces and bases will be paid for in accordance with and under the temporary and permanent pavement repair items, or as directed by the Engineer.

Pay Item	<u>Pay Unit</u>
Test Pit Excavation	$\overline{\mathrm{CY}}$

088-185 ITEM #0202451A

# ITEM #0202503A – REMOVAL OF CONCRETE CURBING

Work under this item shall conform to the requirements of Section 2.02, amended as follows:

# **2.02.01-Description:** Add the following:

Concrete Curbing shall be removed and disposed of where shown on the contract plans or as ordered by the Engineer.

# **2.02.03-Construction Methods:** Add the following:

Wherever Concrete Curbing is to be removed, such removals shall be made to existing joints except when directed by the Engineer.

# **2.02.04-Method of Measurement:** Add the following:

The work of removing concrete curbing shall be measured for payment by the number of linear feet of concrete curbing removed.

# **2.02.05-Basis of Payment:** Add the following:

The removal of concrete curbing will be paid for at the contract unit price per linear foot for "Removal of Concrete Curbing" which price shall include all materials, equipment, tools and labor incidental thereto and all disposal costs.

Pay Item	<u>Pay Unit</u>
Removal of Concrete Curbing	LF

088-185 ITEM #0202503A

# ITEM #0213011A - GRANULAR FILL

Work under this item shall conform to the requirements of Section 2.13, amended as follows:

# **2.13.01-Description:** Add the following:

This material shall be used as replacement for unsuitable material under pipe bedding material, as trench backfill and for other uses designated on the plans or as directed by the Engineer.

Pay ItemPay UnitGranular FillCY

088-185 ITEM #0213011A

# ITEM # 0304002A PROCESSED AGGREGATE BASE

**3.04.01** – **Description:** All aspects of Project Work covered by this specification shall conform to requirements of Section 3.04 of CTDOT Standard Specifications, except as amended herein.

**3.04.02** – **Materials:** Reclaimed miscellaneous aggregate is not acceptable.

Pay Item Processed Aggregate Base Pay Unit CY

088-185 ITEM #0304002A

# ITEM #0406999A - ASPHALT ADJUSTMENT COST

# The Asphalt Price is available on the Department of Transportation web site at:

http://www.ct.gov/dot/asphaltadjustment

The asphalt adjustment cost will be based on the variance in price for the performance-graded binder component of hot mix asphalt (HMA), Polymer Modified Asphalt (PMA), and Ultra-Thin Bonded Hot-Mix Asphalt mixtures completed and accepted in the contract.

An asphalt adjustment cost will be applied only if all of the following conditions are met:

#### I. For HMA and PMA mixtures:

- a. The HMA or PMA mixture in which the adjustment is being applied is listed as a contract item with a pay unit of tons or metric tons.
- b. The total quantity for all HMA and PMA mixtures in a contract or individual purchase order (Department of Administrative Service contract awards) exceeds 1000 tons or more.
- c. The difference between the posted *Asphalt Base Price* and *Asphalt Period Price* varies by more than \$5.00.

#### II. For Ultra-Thin Bonded HMA mixtures:

- a. The Ultra-Thin Bonded HMA mixture in which the adjustment is being applied is listed as a contract item.
- b. The total quantity for Ultra-Thin Bonded HMA mixture in a contract exceeds:
  - i. 800 tons (727 metric tons) if Ultra-Thin Bonded HMA is listed as a contract item with a pay unit of tons or metric tons.
  - ii. 30,000 square yards (25,080 square meters) if Ultra-Thin Bonded HMA is listed as a contract item with a pay unit of square yards or square meters.
    - Note: The quantity of Ultra-Thin Bonded HMA measured in tons shall be determined from the material documentation requirements set forth in the Ultra-Thin Bonded HMA Special Provision.
- c. The difference between the posted *Asphalt Base Price* and *Asphalt Period Price* varies by more than \$5.00.
- d. No Asphalt Adjustment Cost shall be applied to the liquid emulsion that is specified as part of the Ultra-Thin Bonded HMA mixture system.

088-185 ITEM #0406999A

III. Regardless of the binder used in all HMA and/or PMA mixtures, the Asphalt Adjustment Cost will be based on PG 64-22.

The Connecticut Department of Transportation (ConnDOT) shall post on its website, the average per ton selling price (asphalt price) of the performance-graded binder. The average is based on the high and low selling price published in the most recent available issue of the **Asphalt Weekly Monitor**® furnished by Poten & Partners, Inc. under the "East Coast Market – New England, New Haven, Connecticut area", F.O.B. manufacturer's terminal.

The selling price furnished from the Asphalt Weekly Monitor  $^{\circ}$  is based on a standard ton (US\$/ST). The metric ton price is determined by applying a factor of 1.1023 (US\$/ST x 1.1023 = US\$/mton). Example: \$150.00/ton x 1.1023 = \$165.34/mton

Formula: HMA x 
$$\underline{PG\%}$$
 x [(Period Price - Base Price] = \$ \_\_\_\_, where

#### - **HMA**:

- 1. For HMA, PMA, and Ultra-Thin Bonded HMA mixtures with pay units of mass: The quantity (tons or metric tons) of accepted HMA, PMA, or Ultra-Thin Bonded HMA mixture measured and accepted for payment.
- 2. For Ultra-Thin Bonded HMA mixtures with pay units of area:
  The quantity of Ultra-Thin Bonded HMA mixture delivered, placed, and accepted for payment, calculated in tons or metric tons as documented according to the Material Documentation provision (section E) of the Ultra-Thin Bonded HMA Special Provision.
- Asphalt Base Price: The asphalt price that is posted on the ConnDOT website 28 days before the actual bid opening posted.
- Asphalt Period Price: The asphalt price that is posted on the ConnDOT website for the period in which the HMA, PMA mixture is placed.
- Performance-Graded Binder percentage (**PG%**)
  - 1. For HMA or PMA mixes: PG% = 4.5
  - For Superpave 1.5 inch (37.5mm), Superpave 1.0 inch (25.0mm), PMA S1, HMA S1, and Class 4

$$PG \% = 5.0$$

• For Superpave 0.50 inch (12.5mm), HMA S0.5, PMA S0.5, and Class 1

088-185 ITEM #0406999A

- PG % = 6.0
- For Superpave 0.375 inch (9.5mm), HMA S0.375, PMA S0.375, Superpave 0.25 inch (6.25mm), HMA S0.25, PMA S0.25, Superpave #4 (4.75mm) and Class 2
- 2. For Ultra-Thin Bonded HMA mixes:
  PG% = Design <u>% PGB</u> (Performance Graded Binder) in the approved job mix formula, expressed as a percentage to one decimal point (e.g. 5.1%)

The adjustment shall not be considered as a changed condition in the contract because of this provision and because the Contractors are being notified before submission of bids.

**Basis of Payment:** The "Asphalt Adjustment Cost" will be calculated using the formula indicated above. A payment will be made for an increase in costs. A deduction from monies due the Contractor will be made for a decrease in costs.

The sum of money shown on the estimate, and in the itemized proposal as "Estimated Cost", for this item will be considered the bid price although payment will be made as described above. The estimated cost figure is not to be altered in any manner by the bidder. If the bidder should alter the amount shown, the altered figure will be disregarded and the original cost figure will be used to determine the amount of the bid for the Contract.

088-185 ITEM #0406999A

# ITEM #0507001A - TYPE "C" CATCH BASIN ITEM #0507022A - TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE II ITEM #0507048A - TYPE "C" C.B. WITHOUT SUMP ITEM #0507201A - TYPE "C-L" CATCH BASIN

Work under these items shall conform to Section 5.07 "Catch Basins, Manholes and Drop Inlets" of the Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction (Form 816), amended as follows.

# **5.07.03-Construction Methods:** Add the following:

On precast units the catch basin top shall be set on a minimum of two (2) courses of brick, so that the casting can be adjusted in the future without disturbing the precast sections.

Pay Item	<u>Pay Unit</u>
Type "C" Catch Basin	EA
Type "C" Catch Basin Double Grate – Type II	EA
Type "C" C.B. Without Sump	EA
Type "C-L" Catch Basin	EA

# ITEM #0507004A - REMOVE CATCH BASIN/MANHOLE

# **Description:**

Work under this item shall consist of the removal and satisfactory disposal of all catch basins and/or manholes as shown on the plans or as directed by the Engineer.

#### **Construction Methods:**

All catch basins and manholes to be removed shall be completely removed and all pipes plugged with cement masonry or removed completely as indicated on the plans or as directed by the Engineer.

#### **Method of Measurement:**

Removal of catch basins and manholes will be measured as units. The depth of a unit shall be the total depth, measured from the highest point of the grate or cover to the bottom of the floor slab.

# **Basis of Payment:**

This work will be paid for at the contract unit price each "Remove Catch Basin/Manhole" complete, which price shall include all materials, equipment, tools and labor incidental thereto.

All excavation, disposal of materials, cement masonry and backfill material will be considered included in the unit price bid.

Pay ItemPay UnitRemove Catch Basin/ManholeEA

088-185 ITEM NO. 0507004A

# <u>ITEM #0507601A – MANHOLE</u> <u>ITEM #0507685A – MANHOLE - 6' DIAMETER</u>

**3.01.01 – Description:** Work under these items shall consist of the construction of all manholes, block, poured in place concrete or precast, 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 constitutes the completed structure.

**3.01.02** – **Materials:** The materials to be used in the construction shall be those indicated on the plans or ordered by the Engineer and they shall conform to the requirements of these specifications.

Concrete shall be Class "A" as specified in Section M.03.01 and as amended as follows:

- (a) The mix proportion shall be 1:2:4.
- (b) The maximum size of the coarse aggregate shall be 3/4".
- (c) Minimum compressive strength shall be 3000 psi at 28 days.

Concrete building brick, masonry concrete units and brick shall conform to Section M.08.02.

All frames and covers shall be of standard City of New Britain design and specification and as detailed on the plans.

Watertight manhole castings shall be a Fay, Spofford and Thorndike Watertight #LTW300 – manufactured by E.L. LeBaron Foundry Company, Brockton, MA 02403, locations as noted on the plans.

Concrete and reinforcement steel for precast manhole risers shall be as specified in the current ASTM C-76, Specification. Manhole risers shall be as specified in the current ASTM C-478 Specification. 5' I.D., 4' I.D. and 3' I.D. Reinforced Concrete Riser Sections shall be supplied in 2', 3' and 4' lengths by a reputable manufacturer who shall have prior approval of the Engineer and the City of New Britain. The Contractor shall supply the precast risers with rubber "O" ring joints of Kent-seal (CS-202) all weather Butyl Rubber Flexible permanent gaskets. One (1") inch size for 4' manhole, one and a half (1-1/2") for 5' manhole.

Non-shrink mortar grout shall be used on the inside and outside of manhole precast section at joints, around existing pipe and for the shelf when building manholes over existing sewer lines (re: dog house manholes).

Brick shall conform to Section M.08.02-1 of the Standard Specifications.

Damp proofing materials for sanitary manholes shall conform to the requirements of Section M.12.05 of the CTDOT Standard Specifications.

Pipe for drops shall be P.V.C. conforming to the following. PVC pipe sized 6" - 15" shall conform to ASTM D3034 with a minimum wall thickness to SDR 35. PVC pipe sized 18" - 27"

shall conform to ASTM F679, with a minimum wall thickness to Type 1, SDR 35. PVC pipe shall have factory-installed integral bell gasketed joints and conform to ASTM F477. Connection to manholes shall be by use of manhole coupling adapters or flexible rubber connections. PVC shall not be grouted directly to concrete.

**3.01.03 - Construction Methods:** Trench Excavation and/or Rock Excavation and Backfill for manholes shall be done in accordance with the excavation provisions of the Trench Excavation item and/or Rock in Trench Excavation item found elsewhere in this specification.

All manholes and structures shall be block, pre-cast or poured in place concrete and constructed as shown on the plans. All reinforcing steel shall conform to Section 6.02.

All new sanitary manholes shall have a synthetic rubber flexible pipe to manhole connector employed in the connection of the sanitary sewer pipe. The connector shall be "Kor-N-Seal" as manufactured by NPC Systems, Inc., Milford, New Hampshire or approved equal.

Existing concrete manholes shall have the pipe entrance core-drilled in the field and a flexible pipe to manhole connector, "Kor-N-Seal" or equal shall be installed.

The connector shall be the sole element relied on to assure a flexible watertight seal of the pipe to the manhole. No adhesives or lubricants shall be employed in the installation of the connector into the manhole. The rubber for the connector shall comply with ASTM C443 and ASTM C923. It shall be 3/8" (9.4mm) thick or greater, and consist of EPDM and Neoprene or elastomers designed to be resistant to ozone, weather elements, chemicals, including acids, alkalis, animal and vegetable fats, oils and petroleum products from spills.

All stainless steel elements of the connector shall be totally non-magnetic series 304 Stainless including the worn screw assembly for tightening the steel bank around the pipe. The worn screw for tightening the steel band shall be torqued by a breakaway torque wrench set for 60-70 inch/lbs.

The connector shall be installed in the manhole wall by activating the expanding mechanism in strict accordance with the recommendation of the connector manufacturer. The connector shall be of a size specifically designed for the pipe material and size being utilized on the project.

Existing manholes other than concrete manhole shall when the main sewer pipeline is PVC pipe have a PVC manhole adapter with an abrasive exterior as manufactured by GPK Products, Inc. Fargo, North Dakota Telephone 1-800-437-4670 or approved equal installed in the manhole.

The Contractor shall place Class "A" concrete in accordance with Section 6.01 of the CTDOT Standard Specifications amended as follows:

(a) Section 6.01.03 – Construction Methods, paragraph 22-Test Beams and Cylinders shall be deleted and the following substituted:

The Contractor shall furnish the necessary concrete and several test cylinders from each day's run of concrete as directed by the Engineer and in accordance with ASTM C-31. The Contractor

shall have a reputable testing laboratory, subject to the Engineer's approval, furnish the Engineers with the results of the test cylinders which shall be cured by the same method as used for the concrete which they represent and tested in accordance with ASTM C-39.

- (a) Expansion, contraction and construction joints will be located as shown on the plans. Expansion joints shall be located at any point where the enclosure is partially in rock and partially in earth cut, or as directed by the Engineer.
- (b) Section 6.01.04 Method of Measurement and Section 6.01.05 Basis of Payment are deleted.

There shall be no measurements made as to the quantity of concrete placed, and the cost for placing the same shall be included in the unit price bid for the special structures and manhole items. No concrete shall be poured in cold weather unless the following precautions are complied with to prevent freezing.

When temperatures are 32 degrees to 35 degrees and rising, the water required shall be heated. After pouring, the finished concrete shall be covered immediately with dry mat or board upon which shall be placed six inches of hay or straw and another layer of mats. Protection time shall be 72 hours.

When temperatures are 24 degrees and above and rising, all ingredients shall be heated before mixing. Finished concrete shall be protected as described above except eight inches of straw or hay shall be used. Protection time shall be 72 hours.

Contractor shall submit to the Engineer for approval shop drawings showing the location, size, spacing of all reinforcing steel and certified and sealed calculations showing the precast manholes will take H-20 loading. Certification must be by a registered professional Engineer in the State of Connecticut. Test cylinders of the 5000 psi concrete shall be in accordance with paragraph 3a herein.

For temperatures below 24 degrees, all ingredients shall be heated before mixing. The finished concrete shall be immediately covered and heating device used to maintain a temperature of 70 degrees around the concrete for a period of 72 hours.

Any manhole or structure constructed during cold weather is done at the Contractor's risk and all damaged manholes or structures shall be removed and replaced at his own expense.

Manhole structures shall be shaped as shown on plans. In no case shall the inside bottom of a manhole structure be flat but shall have a smooth shaped invert with a depth equal to the diameter of the largest pipe connected to the manhole. The invert may be constructed of masonry brick or formed concrete with a smooth finish. No ladder rungs are to be installed in any City manhole. The cost of the manhole invert shall be included in the price bid for the manhole structure.

Manholes shall be covered with a City of New Britain standard cast iron frame and cover, or as otherwise specified. Until such time as frames and covers are set, manholes shall be kept

covered with planks or temporary covering to protect persons and animals and to prevent foreign matter from entering the manhole.

All RC Pipe shall be recessed into the face of the manhole or structure and pipe reinforcing steel shall be covered with a minimum of 1-1/2" mortar. Provisions must be made for all pipes, (existing and proposed) and stubs entering the manhole.

All manholes or structures shall be watertight and sanitary manholes shall be damp proofed. Manholes or structures found having infiltration shall be repaired by the Contractor to the satisfaction of the Engineer.

The Contractor shall place a minimum of 6" of foundation material under all manholes. The cost of this foundation material, which is specified elsewhere herein, shall be included in the price bid for the manhole.

At least the top six (6) inches of each manhole shall be constructed of brick, for the purpose of adjusting the elevation of the frame and cover. The cast iron frame and cover shall conform to the plans and shall be well coated with an approved bituminous paint prior to being put into place.

The joints between the manhole frame and chimney or corbel section of sanitary manholes shall be sealed with an internal flexible rubber seal as manufactured by Cretex Specialty Products, Waukeska, WI, or approved equal.

The internal flexible Rubber Seal shall be extruded from a high grade rubber compound conforming to the requirements of ASTM C-923 with a hardness (durometer) of 45+5.

The sleeve shall be double pleated with a minimum unexpanded vertical height of 8 inches, a minimum thickness of 3/16 inches and shall be capable of a vertical expansion when installed of not less than 2 inches. The top and bottom section of the sleeve shall contain an integrally formed expansion band recess and multiple sealing fins. Any splice used to fabricate the sleeve shall be hot vulcanized and have a strength such that the sleeve shall withstand a 180 degree bend with no visible separation.

The expansion bands used to compress the sleeve against the manhole shall be 16 gauge stainless steel conforming to ASTM A-240 type 304, with a minimum width of 1-3/4 inches. The expansion mechanism shall have the capacity to develop the pressures necessary to make a watertight seal and shall have a minimum adjustment range of 2 diameter inches. Screws and nuts used for this mechanism shall be stainless steel conforming to ASTM F-593 and 594, type 304.

Cast iron frame shall be set to a full, even bearing on a 1" minimum cement mortar bed at the required line and grade. The flange of the frame shall not project outside of masonry on which it rests. Inner circle of frame shall not overhand more than one inch. After frames are set, care must be exercised that they are not moved or disturbed by other operations such as backfilling, paving work, etc., and if disturbed, shall be reset on fresh bed of mortar.

88-185

When the construction of a new manhole is in conflict with an existing sewer and/or it becomes necessary to divert the existing flow away from the new construction, then the Contractor shall supply the necessary labor, equipment and materials to divert the flow and he shall include the cost of same in the price bid for the applicable Manhole item. When concrete blocks are used for the walls, they shall be laid by an experienced mason or bricklayer.

When existing sanitary sewers are to be connected to new manholes, the Contractor shall provide all necessary equipment, labor, and materials to make the connection and the cost of this work shall be included in the price bid for the applicable Manhole item.

When existing sewers are in conflict with the new manhole and the plans indicate that the existing sewer is to be plugged, the Contractor shall do the necessary work to plug the existing sewer as detailed in the plans and the cost of the plug shall be included in the price bid for the applicable manhole item.

On all manholes the cone section shall be set on the downstream side with the straight wall on the upstream side, the manhole casting shall be centered over the middle of the main channel of flow.

All manholes over 12' deep shall be Type II 5' inner diameter (min.). All manhole drops shall be constructed as shown on the plan, Standard Detail or as directed by the Engineer. If it becomes necessary to reset a manhole, it shall be done in conformance of applicable sections of Section 5.07 of CTDOT Standard Specifications.

All pavement replacement around manhole castings shall be to a minimum depth of 5 inches for a 5 foot diameter area. This area shall be compacted with extra care to provide good pavement densification around the manholes.

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.

#### 1. TESTING

All Sanitary Sewer manholes shall be vacuum tested before acceptance by the City with a vacuum testing machine as manufactured by NPC Systems, Inc., Milford, N.H. or approved equal. The testing shall be done after assembly at the manhole prior to brick work and casting placement. All lift holes shall be plugged with a non-shrink mortar and the seal between the manhole sections shall be in accordance with ASTM C923. The Contractor shall plug the pipe openings, taking care to securely brace the plugs and the pipe. After placing the vacuum tester set in place.

- A. Inflate the compression band to effect a seal between the vacuum base and the manhole.
- B. Connect the vacuum pump to the outlet port with the

Valve open.

C. Draw a vacuum to 10" of Hg. and close the valve.

The test shall be considered to pass if the vacuum remains at 10" Hg. or drops to 9" Hg. in a time greater than one minute. If the manhole fails the initial test, the Contractor shall locate the leak and make proper repairs, then retest the manhole structure until such time that it passes the vacuum test.

**3.01.04 - Method of Measurement:** These items will be measured in units for each manhole constructed and accepted in place. The applicable depth shall be determined by measuring from the bottom of the footing to proposed rim elevation.

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.

3.01.05 - Basis of Payment: This item shall be paid for at the contract unit price per manhole structure measured per unit complete and accepted in place. This price shall include the cost of all excavation, sheeting, shoring, dewatering, pumping, maintenance of existing flows, furnishing and installing foundation material, concrete, masonry brick, concrete blocks, brick or pipe inverts, inside or outside drops, stubs in manholes, precast sections, damp proofing, reinforcing steel, standard casting frame and cover, watertight manhole castings, manhole casting flexible rubber seals, core drilling, flexible pipe to manhole connector or adaptors, backfill, compaction, reconnection of existing sewers, plugging sewers to be abandoned and removal of existing structures to be abandoned, manhole testing and the required 5' diameter 4' pavement replacement around the manhole casting and all other labor, equipment and material necessary to complete the intended installation.

Reset units will be paid for at the contract unit price each for "Reset Manhole (Storm)", complete in place, which price shall include excavation, pervious material, backfill, cutting of pavement, removal and replacement of pavement structure, and all materials, equipment, tools and labor incidental thereto, except that when the work requires reconstruction greater than 3 feet, measured vertically, then the entire cost of resetting the unit will be paid for as extra work in accordance with the provisions of Article 1.04.05.

Where rock is encountered, it shall be paid for at the unit price bid per cubic yard for the "Rock in Trench Excavation" item and in accordance with payment lines which are 24" outside of the walls and to a depth equal to the elevation of the bottom surface of the base slab.

Pay Item	<u>Pay Unit</u>
Manhole	EA
Manhole - 6' Diameter	EA

ITEM #0651012A – 15" R.C. PIPE ITEM #0651013A – 18" R.C. PIPE ITEM #0651015A – 24" R.C. PIPE ITEM #0651743A – 6" POLYVINYL CHOLORIDE PIPE ITEM #0651746A – 12" POLYVINYL CHLORIDE PIPE

**Description:** Under this item, the Contractor shall install and connect storm and/or sanitary sewer pipe of the size, type and at the locations and grades as shown in the plans or as ordered by the Engineer. It shall include the replacement of storm laterals to the streetline/property line of each property and connecting the laterals to main storm sewer.

This item will not be used to pay for sewer damaged in the course of operations due to the Contractor's negligence, as determined by the Engineer.

**Materials:** Type of pipe and joints, as ordered by the Engineer shall be as follows:

A. Specifications for Reinforced Concrete Pipe shall conform to ASTM C-76, amended to date and shall be Class IV, Wall B, unless otherwise noted on the plans; the minimum length shall be 8' except that shorter lengths are to be supplied where required. Each section of pipe delivered to the job shall be marked with the manufacturer's name, date manufactured and class. Reinforced concrete pipe used for sanitary sewer shall be coated on the inside including bell and spigot with coal tar epoxy coating.

All joints shall be mortar joints in accordance with Section 6.51 of the Standard Specifications, for storm sewers. Sanitary Sewers shall use a Permanent Seal interlock pipe joint or approved equal.

- B. PVC pipe sized 6" 15" shall conform to ASTM D3034 with minimum wall thickness to SDR 35. PVC pipe sized 18"-27" shall conform to ASTM F679, with minimum wall thickness to Type 1, SDR 35. PVC pipe shall have factory-installed integral bell gasketed joints and conform to ASTM F477. Connection to manholes shall be by use of manhole coupling adapters or flexible rubber connections. PVC shall not be grouted directly to concrete.
- C. All ductile iron pipe shall be new pipe manufactured in accordance with ANSI A21.51-80 or latest revision. Ductile iron pipe furnished shall conform to thickness class 50. Pipe joints shall be push-on type which employ "O" ring joints or equivalent. "O" rings shall be of elastic compound resistant to ground water and sewage, which will endure permanently. All pipe shall have a cement mortar lining twice the thickness specified in ANSI A21.4.-80.
- D. The materials used in the manufacture of wye and tees shall conform with the requirements for the pipe with which they shall be used and any variation of such requirements shall be subject to the approval of the Engineer. Fittings shall be manufactured or recommended by the manufacturer of the approved pipe. Field fabricated or fittings fabricated by other than approved

088-185

manufacturer shall not be allowed unless approved by the Engineer. Joints shall be bell and spigot, push-on type using factory installed integral bell gasket joints, as recommended by the pipe manufacturer.

Class "A" Concrete shall conform to Section M.03 of the CTDOT Standard Specifications.

**Construction Methods:** All portions of Section 2.05.03 shall apply.

#### A) General

Sanitary Sewer pipe shall be of the sizes, types and materials indicated by the Contract Documents with no substitutions. All pipe shall be installed, supported, jointed, tested and backfilled as indicated or required for the particular job, location or condition by the Contract Drawings, Technical Specifications, or other contract documents. All pipe, when in place, shall be precisely true to the line and grade indicated therefore in the Contract Documents or directed by the Engineer, sound, well installed, jointed and bedded and free from defects.

Pipe installation in general shall start at the downstream and progress upstream with bell or groove ends placed upstream. If, however, due to the restrictions imposed by land acquisition and/or other construction activities, construction may be done in sections as approved by the Engineer.

Straight runs (not with bends) of sewer line pipes and laterals over 50 feet in length shall be installed to the line and grade by the use of lasers only. Such laser equipment shall be furnished by the Contractor and operated by competent personnel. Equipment and operating procedures shall be subject to the approval of the Engineer.

Where bends occur and on laterals less than 50 feet, the pipes shall be installed using a grade string stretched taut above the line of pipe between batter boards averaging 25 feet and not exceeding 30 feet apart and by measuring down to the bed for each prior to setting it in place and to the end of each pipe, when it has been placed, by means of a suitable grade pole, and brought to line with a plump bob, all of which tools and equipment shall be furnished and operated by competent Contractor's personnel satisfactory to the Engineer.

At the start of each job, when the Contractor is in a position to start installation pipe, he shall notify the proper representative of the supplying pipe company who will come to the job and thoroughly instruct the Contractor, his men and the Inspector in the proper methods of installation said pipe. The Contractor shall notify his men who are actually doing the installation that this method shall be strictly enforced unless otherwise specified or directed by the Engineer.

Details of gasket attachment and joint formation will, in general, follow the directions of the manufacturer of the joint material and of the pipe, based upon the design thereof and their experience with such joints elsewhere, all subject to the approval of the Engineer.

088-185

Pipe shall be installed and the joints made in the manner set forth by the manufacturer. Where applicable, immediately after pipes are put together, the position of rubber ring and the joint shall be inspected to be sure it has been properly put together. Gauges shall be furnished to the Contractor (and the Inspector) by the manufacturer for this purpose, and all joints shall be checked with such gauge. All defective joints shall be corrected immediately.

Wyes or tee connections for laterals or chimneys should be installed as shown on the contract drawings or as directed by the Engineer, in accordance with manufacturer's recommendations.

At any time during pipe-installation operations, if the occasion arises, when instruction or advice is required from a pipe representative, he shall be notified and shall come to the site of pipe-installation operations for consultation before any further pipe is installed involving any such problems.

Where the pipe connects with the outside faces of manhole walls or the outside faces of the walls of other structures, there shall be a short section of pipe (usually 2 feet) placed at the connections to the structure. In order to accomplish this, without cutting pipe and destroying water tight integrity by having other than the normal type joints, minor modifications in manhole locations may be made with the approval of the Engineer. See manhole specification for pipe tie-in requirements.

When crushed stone bedding is used around the pipe, provisions shall be made to physically prevent the encroachment into the voids between the stones of fine material present in the trench backfill material by placing the bedding and pipe within an envelope of geotextile, as shown on The Flexible Pipe Trench Standard Detail. The fabric shall be fitted around manholes and extend one foot up the manhole, all laps shall be a minimum of eighteen inches.

All new pipe installations shall be cleaned of all construction debris and left in new condition. Cost for this cleaning shall be included in the price of the new sewer pipe.

# B) Inspection

# 1) One Inspector per Pipe-Installation Crew

To enable the representatives of the Engineer to oversee pipe-installation and other work, in general, only one pipe-installation crew will be permitted to operate at any time under one Inspector. Thus, the number of pipe-installation crews and the number of locations at which pipe may be installed simultaneously under this contract may be limited by the number of Inspectors assigned by the Engineer to oversee that type of work on the Contract. If the Contractor wishes to install pipe at more than one location on a given day, or add additional pipe-installation crews, he must notify the Engineer at least two days in advance so that an adequate number of Inspectors may be assigned to the job.

#### 2) Contractor to Assist Inspectors

The Contractor shall furnish materials, tools and men to assist the Inspector and to handle survey equipment, levels, grade poles, plumb bobs, straight edges, laser equipment, and other equipment used for transferring grades, setting strings on profiles or grade slats or aligning pipe. While Inspectors may at times assist or check alignment, the Contractor's crew shall not be dependent upon the Inspector for the performance of such work. All labor, tools and facilities needed to set or transfer line and grade, to measure pipe beds, pipe grade and line etc. shall be furnished by the Contractor.

# C) Dewatering

#### 1) General

The Contractor shall provide all necessary pumps, dams, drains, ditches, flumes, well points and other means for excluding and removing water from trenches, tunnels and other parts of the work, and for preventing the slopes from sliding or carving all in accordance with the item "Trench Excavation and Backfill".

# 2) Foundation Stone Drain

Where, in the opinion of the Engineer, some form of under-drainage is desirable but conditions do not warrant the installation of a pipe underdrain, he may order a installation of processed stone or granular fill placed under the normal pipe bedding material to serve as a drain or as additional foundation or both.

# 3) Engineer Need Not Order Underdrain

The Engineer will not be under any obligation to order underdrain of any type installed to lower groundwater levels in general or for other purposes when in his opinion, the underdrain is not needed for the construction of the sewer or structure at the point in question. The matter of when to order underdrain of any type at the expense of the Local Public Agency is solely at the discretion of the Engineer. The fact that the Engineer did not order the underdrain at any point shall not relieve the Contractor of his duty to properly dewater trenches.

#### D) Bedding Material for Sewers

This section refers to bedding material under the sewer and its appurtenances. It does not apply to street pavement foundations above the sewer and its appurtenances. It does not apply to street pavement foundations or other structures, which are covered by other sections of the specifications.

Generally, pipe will be installed on Bedding Material and back-filled as shown on the Standard Details. Where the soil in the subgrade is found to be soft, loose, freshly-filled earth, unstable or unsuitable as a base for the proposed sewer or appurtenances, the Engineer may, at his discretion,

088-185

order it excavated to such additional depth and width as he may deem proper and replaced with Granular Fill, Processed Stone, Class "A" Concrete, or similar material as he may direct.

# 1) Pipe Installed on Bedding Material

Foundations of Bedding Material required by the Contract Drawings, other Contract Documents as ordered by the Engineer, shall be constructed as required or ordered. The top of the Bedding Material shall be brought carefully to the proper grade well tamped or compacted as may be directed and shaped for the barrel of the pipe and the pipe installed thereon.

# 2) Concrete Foundations

Where called for on the Contract Drawings or directed by the Engineer, Sanitary Sewer Pipe shall be constructed on a concrete slab, on a concrete cradle, on foundation stone with concrete cap or encased entirely in concrete. Slabs may be pre-poured ahead of sewer placement or poured integrally with the cradle after the sewer is placed, at the option of the Contractor and subject to the approval of the Engineer.

Where pipe is to be installed on a foundation as described in preceding sections and encased or bedded in concrete above the base, it will be installed as described in those sections and then concrete will be placed on each side up to the height or extent required, using methods that will insure that all spaces under and on the sides of the pipe are completely filled. Concrete will be carried out to the trench walls or to sheeting resting against those walls or to the minimum required lines if such lines are stipulated for the job.

Where pipe is to be encased in concrete or installed in a Class "A" concrete cradle, as detailed on the drawings or directed by the Engineer, the pipe will be installed on wooden cross sills of adequate size and area to support the pipe to grade and line after excavating to required subgrade. Wooden wedges or shims and tie downs will be used to secure pipe in place and to proper lines and grades.

A pre-poured foundation will consist of a slab of Class "A" Concrete of the sizes and dimensions shown on the Contract Drawings and of such thickness and width as the Engineer may order, poured into space a sufficient time in advance of installation pipe thereon so that the concrete will have set prior to installation pipe.

The time required for and the degree of setting of concrete will be approved by the Engineer (minimum of three (3) days). The upper surface of the concrete base will be carefully leveled off to a grade about 2 inches below the bottom of the barrel of the pipe for sufficient width. The top of the pre-poured slab should contain adequate bell holes if bell-and-spigot pipe is to be installed. Pipe will then be installed to line and grade, using wooden shims or wedges as necessary, jointed as specified elsewhere, and then the space between slab and lower surface of pipe filled with concrete carried up to such height as

my be required. Concrete will be poured in from one side until it appears flowing through into the other side. Backfill on sides of pipe above the concrete base will be as specified or as directed by the Engineer. Backfill shall not be placed thereon for two (2) days unless public safety requires otherwise.

# E) Pipe Installation General

Pipe installation in general shall start at the downstream end and progress upstream. If, however, due to restrictions imposed by land acquisition and/or other construction activities, construction may be done in sections as approved by the Engineer.

# 1) Pipe Installed on Bedding Material

Where no underdrain, cradle, special bedding or haunching is required, the pipe shall be installed as follows:

The trench will be excavated to lines and grades shown on the drawings, the typical trench section or as ordered. Loose native material will be removed from the excavation.

The bedding material will be placed to the depth required by the Contract Drawings or Standard Details for the bedding and compacted, then shaped by hand just before the pipe is set in place to conform as nearly as possible to the shape and grade of the outside of the lower part of the pipe barrel and bells. The grade of this bedding material shall be measured and check at least once for each length of pipe, and in any case, at intervals of not more than 4 feet apart, immediately before pipe is installed upon the base. The base must be such that the barrel of the pipe will be evenly supported for its entire length. Pipe must not be supported by bells or by lumps of soil, sills, shims, etc. Pushing fine material under any pipe installation on its bed in order to bring it up to grade or line will not be permitted. The bed must be formed to the correct grade before the pipe is placed on it.

After preshaping the bedding material, the pipe will then be installed accurately to line and grade, pushed home against the end of the last pipe previously installed, and held in position. Sufficient bedding material as required shall then be placed on each side to hold the pipe in position while the joint is being made. Joints will then be made, as described elsewhere, and inspected. After the pipe has been installed, additional bedding material as required shall be added along the full width of the trench and compacted on the sides of the pipe to the height required by the Contract Drawings or Standard Details for trench excavation.

Holes under bells must be completely filled, suitable tools must be provided and used to ram the fill tightly under and against the rounded sides of the pipe so that all space on each side of each pipe is entirely filled with well-compacted material.

From the top of the bedding material to a point 1 foot above the top of the pipe, the trench shall be backfilled and compacted in layers not to exceed 6", with granular material approved by the Engineer. P.V.C. pipe shall have 6" below and above and 12" on both sides of 3/4" stone bedding material.

The remaining trench area shall then be backfilled and compacted with granular fill (in City streets) or suitable approved material in accordance with the Item "Trench Excavation and Backfill".

# 2) Pipe Installed in Rock Trench

In trenches excavated through rock, the rock shall be removed so that no projecting points or spurs of rock projects within 6 inches of the bottom of the pipe. The bottom of the trench shall then be filled with bedding material as required or ordered, including geotextile for flexible pipe, this fill being well tamped and compacted in place. Then the bedding material shall be smoothed off to grade for the pipe, bell holes provided, etc. and the backfilling and compacting under, around and directly over the pipe installed in rock cuts shall be as previously described. No fill of rock fragments larger than 3 inches in longest dimension will be allowed along the sides of the pipe or until the pipe has been covered to a depth of at least 2 feet with compacted material.

Where drawings or any Contract Document requires or the Engineer order pipe in rock trenches to be installed in a concrete bed, and for poured-in-place concrete structures, the space between the face of the rock cut and the bottom and sides of the sewer or structure will be filled with concrete.

#### 2) Sanitary Sewer Construction in Proximity to Water Main

The Engineer may vary the location of sanitary sewers in close proximity to water mains. No variations in location will be permitted without approval of the Engineer.

a) Horizontal separation – Sewers should be installed at least 10 feet horizontally from any existing or proposed water main. Should local conditions prevent a lateral separation of 10 feet a sewer may be installed closer than 10 feet to a water main if (1) it is installed in a separate trench, or if (2) it is installed in the same trench with the water mains located at one side on a bench of undisturbed earth and if <u>in either case</u> the elevation of the sewer is at least 18 inches below the invert of the water main.

- b) Vertical separation Whenever sewers must cross under water mains, the sewer shall be installed at such an elevation that the top of the sewer is at least 18 inches below the bottom of the water main. When the elevation of the sewer cannot be varied to meet the above requirements, the water main shall be relocated to provide this separation or reconstruct it with mechanical joint pipe for a distance of 10 feet on each side of the sewer. One full length of water main should be centered over the sewer so that both joints will be as far from the sewer as possible.
- c) When it is impossible to obtain proper horizontal and vertical separation as stipulated above, both the water main and sewer shall be constructed of mechanical joint cast iron pipe or ductile iron pipe and shall be pressure tested to assure water tightness; or, the sewer shall be concrete encased for a distance of 10 feet on either side of the water main in accordance with the details shown on the Contract Drawings or as ordered by the Engineer.

#### F) Special Construction Methods

The following paragraphs shall apply as modifications to and detailed instruction for "Construction Methods, Pipe Installation General" for the particular type of pipe used. Only those portions of the "Construction Methods, Pipe Installation General" as are not modified hereafter, elsewhere in the Contract Documents or by the Engineer shall apply.

# 1) Reinforced Concrete Pipe (R.C.P.)

Prior to installation the pipe the spigot of the pipe shall be lubricated with an approved vegetable soap mixture (such as Diamond "A" soap gasket lubricant), which will not harm the rubber. The gasket shall then be placed on the spigot end and adjusted to equalize the tension within the gasket around its circumference. After the pipes are aligned in the trench, ready to be joined, all joint surfaces shall be cleaned, and immediately before joining the pipes together, the bell shall be completely covered with the same vegetable soap mixture. The pipe shall then be carefully pushed home into place without damage to pipe, gasket or bells of the pipes. Suitable devices must be used to force the pipes together so that the joints will fit tightly with the inside and outside recesses providing a tight fit as recommended by the pipe manufacturer.

# 2) Polyvinyl Chloride Pipe (P.V.C.)

#### a) Handling and Storage

Pipe and fittings should be protected from direct sunlight. Store pipe in a horizontal position and supported along its entire length. Do not stack pipe over two feet high. As with any kind of pipe, PVC pipe should be handled with reasonable care to prevent damage.

#### b) Installation

Cutting Pipe – Use a handsaw, pipe cutter with a thin cutting wheel or power saw with a fine tooth blade. Cut the pipe square and remove burrs inside and outside with a knife or coarse file.

#### c) Allowable Transverse Pipe Deflection

Plastic pipe provided under this specification shall be so installed in the ground that the maximum transverse deflection ("out-of-round") shall not exceed 5 percent. Such transverse deflection shall be computed by dividing the amount of transverse deflection (normal diameter less minimum diameter when measured) by the normal diameter of the pipe.

After an initial inspection by the Engineer, if in his opinion the transverse deflection may be excessive, he may order the Contractor to arrange for and take accurate measurements of the pipe at whatever intervals and at whatever locations between such adjacent manholes as the Engineer deems advisable.

The Engineer may take or order such measurements to be taken at any time during the maintenance period. These measurements shall be taken in a manner and by such methods as approved by the Engineer.

#### 3) Ductile-Iron Sewer Pipe (D.I.P.)

When joining Ductile-Iron Pipe with the push-on type joint, the inside of the bell and the outside of the spigot end shall be thoroughly cleaned to remove oil, grit, excess coating and other foreign matter. The circular rubber gasket shall be flexed inward and inserted in the gasket recess of the bell socket.

A thin film of gasket lubricant shall be applied to either the inside surface of the gasket or the spigot end of the pipe or both. Gasket lubricant shall be supplied by the pipe manufacturer and approved by the Engineer.

The spigot end of the pipe shall be entered into the socket and care exercised to keep the joint from contacting the ground. The joint shall then be completed by forcing the plain end to the bottom of the socket with a forked tool or jack-type tool or other device approved by the Engineer. Pipe that is not marked with a depth mark shall be marked before assembly to assure that the spigot end is inserted to the full depth of the joint. Field cut pipe shall be cut by a saw or pipe cutter (not by chisel or other unapproved methods) and the ends of these lengths shall be filed or ground to resemble the spigot end of such pipe as manufactured. Assembly instructions from the pipe manufacturer shall be strictly followed as approved by the Engineer.

#### G) Backfilling and Compacting

Backfilling and compacting of trenches above the bedding material shown on the details shall be performed in accordance with the item "Trench Excavation and Backfill".

# H) Inspection and Testing

# 1) General

Upon completion of the installation and backfilling portions of the sanitary sewer, the pipe shall be inspected by one or several of the methods subsequently described. This inspection of testing shall be undertaken as the work progresses. The Engineer shall be notified in advance of such inspection and testing and the Contractor shall provide all facilities, materials, equipment and labor required for such testing. Such inspection and testing shall be a prerequisite for acceptance of all work. Sanitary manholes shall be tested in accordance with the manhole specification.

# 2) Visual Inspection

An inspection of the interior of the completed sanitary sewer pipe by direct visual inspection shall be made for all pipe installed from manhole to manhole. Any lights, equipment or labor necessary for such inspection shall be provided by the Contractor.

Any foreign material found in the interior of the sewer, any dirt, debris, or other objects shall be removed by the Contractor. Visible defects such as broken pipe sections, improperly installed gaskets, projecting connections, cracks, visible leaks or other defects shall be noted, corrected and the pipe re-inspected.

#### 3) Inspection by Closed Circuit TV Camera is a Requirement

Upon completion of the infiltration, exfiltration or Air Testing of the new sewer lines (Sanitary and Storm Water) and completion of all tie-ins (Laterals) the Contractor shall make available the services of a portable closed-circuit television inspection camera with remote viewing receiver, as described in detail in the Item "Pipeline Video Inspection". These lines shall be televised, joint tested and sealed, if defective by the Contractor in the presence of the inspector with ownership of the video tape recording to remain with the Local Public Agency. This shall be done prior to acceptance of the work by the City.

# 4) Infiltration, Exfiltration, Air Testing

Where the groundwater level <u>can</u> be maintained at a height of not less than one foot above the top of the pipe for the full length of the section of sewer pipe being tested for leakage, the leakage into the sewers and manholes shall be determined through use of infiltration tests. When the groundwater <u>cannot</u> be maintained at a level of not less than one foot above the top of the pipe for the full length of the section of sewer being tested, the leakage from the sewers and manholes shall be determined through use of exfiltration

tests. When approved by the Engineer, the Contractor may use low air pressure tests in lieu of exfiltration or infiltration tests for PVC pipes. The Contractor shall furnish the owner with certified copies of the leakage test results for the Owner's review and approval.

# Allowable Infiltration and Exfiltration Rates

Infiltration and/or exfiltration rates shall not exceed the following rates for the types of pipes as listed:

T 45:	Infiltration/Exfiltration Rate
Type of Pipe	(gal./mile/inch diam./24 hrs.)
R.C.P.	100
D.I.P.	50
P.V.C. (Unless other m	odified) 50

These requirements will be met for every section (between manholes) of pipe; it is <u>not</u> a cumulative average over several sections of pipe.

Infiltration/Exfiltration rates shall be determined on the main sewer and shall be within the allowable rates for the pipe as specified above prior to the installation of any laterals. All wyes, tees and other fittings in the main sewer line shall be adequately capped or plugged to withstand the maximum anticipated head during exfiltration testing and to prevent debris, groundwater, etc. from entering during infiltration testing. Any caps or plugs which "blow-out" or leak shall be replaced as often as necessary by the Contractor at no additional cost to the Local Public Agency until the main sewer passes the infiltration/exfiltration test.

The first section of pipe (between two manholes) installed by each pipe crew will immediately be tested upon completion in order to check workmanship. The Engineer may call for infiltration or exfiltration tests any time on any section of pipe.

#### 5) Exfiltration Testing

Where so required by the Engineer, after installation and jointing, sanitary sewer pipe shall be tested for leakage by internal water pressure. For this purpose, the Contractor shall furnish and install suitable temporary plugs or stoppers at appropriate intervals along the line, together with suitable riser pipes where manholes cannot be used, through which the pipeline under test may be filled and the required water head applied to the section under test. Water put into the line initially to fill the pipe shall be metered with only the calculated volume of pipe and manholes in gallons allowed to be introduced into the system. In general, such tests will be made on sections extending from manhole to manhole, but sections or other lengths will be tested if conditions make that advisable. When the test is to be made, the Engineer shall be notified in advance, the pipe and

ITEM #0651012A ITEM #0651013A ITEM #0651015A ITEM #0651743A ITEM #0651746A manhole (or riser) filled with water to a level 5 feet above the highest point of the crown of the sewer tested or the groundwater level, whichever is greater, and head for not less than 4 hours, unless otherwise specified, during which time the rate of exfiltration shall be recorded by measuring volume of water used in restoring the water level in the manhole (or riser) to its original level. This general level shall be maintained at all times during the test. If the line fails, a second exfiltration test shall not be performed until the failure is repaired and enough days have passed to allow ground conditions to return to normal.

# 6) Infiltration Testing

If so directed by the Engineer, the sewer shall be tested for infiltration of groundwater at such time or times as the groundwater level is high and after the trench has been backfilled and compacted. The groundwater leakage into the pipe will be measured by the Engineer at such point or points as he may direct, preferably as he may direct, preferably as near the lower end of the section of sewer under test as practicable. The Contractor shall provide or construct suitably calibrated weirs, provide and set temporary stoppers with small pipes from which the flow of water may be measured, or other means of measurement as shall be required, and shall do such pumping as shall be necessary to enable the test to be properly made, and furnish labor to assist the Engineer, all without additional expense to the Owner.

Infiltration testing will be permitted only where the existing groundwater level can be shown to be at least two (2) feet above the highest point of the crown of the sewer being tested. Otherwise, exfiltration testing, as previously described, shall be required. The existing groundwater level shall be determined by direct measurement via an observation well pipe placed in the trench prior to backfilling. The lower end of the observation pipe shall be embedded in the foundation stone used for sewer bedding at approximately the sewer invert elevation, or lower, and the upper end at or above finished grade. Pipe so installed for dewatering purposes may be used for this purpose. Observation pipes shall be installed by the Contractor at no additional cost to the Local Public Agency in locations adjacent to manholes where ordered by the Engineer. They shall be removed upon acceptance of infiltration/exfiltration tests.

# 7) Test by Sections

After any such sections has been tested, the Engineer may, as his discretion, permit capped connections to be made with this section of sewers by other parties; said sections may not be put in service until all sewers contemplated under this Contract have been completed and test unless specifically waived by the Local Public Agency.

#### 8) General

The phrase "per mile of pipes" shall refer to the total length of main sewer, measured through manholes, plus the lengths of all connections, laterals and branches.

The maximum allowable infiltration/exfiltration rate shall be as specified previously in these Specifications. Any sewers not in compliance with these requirements shall be corrected by the Contractor until such time as these rates can be met or approved by the Engineer. Such corrections as necessary shall be made by the Contractor at not additional cost to the Owner.

Temporary stoppers and testing facilities will be removed after this work has been completed and sewer restored in good order.

Should the section of pipeline fail to pass the infiltration/exfiltration test, the Engineer will require the Contractor to inspect the line (including closed circuit TV) to isolate the source of leakage and correct the same. No separate payment will be made for such inspection of corrective measures, the cost thereof being included in the unit cost bid for the various classes and sizes of sanitary sewers.

After such corrective work has been completed, measurements of the flow shall again be made. If the flow still exceeds the allowable rates, further corrective measures shall be taken and continued by the Contractor to reduce the infiltration until it shall, by measurement, be less than the allowable rate.

- 9) Low Pressure Air Testing shall be undertaken in conformance with the following requirements, procedures and criteria:
- a. Equipment shall be Cherne Air-Lot Equipment as manufactured by Cherne Industrial, Inc., Edina, Minnesota, Sewer Air Test System as manufactured by United Surveys, Inc., Cleveland, Ohio, or equal. Equipment shall meet the following minimum requirements:
  - i) Pneumatic plugs shall have a sealing length equal to or greater than the diameter of the pipe to be tested.
  - ii) Pneumatic plugs shall be able to resist internal test pressures without requiring external bracing or blocking.
  - iii) All air used shall pass through a single control panel.
  - iv) Three individual hoses shall be used for the following connections:
    - -From control panel to pneumatic plugs for inflation.
    - -From control panel to sealed line for introducing the low pressure
    - -From sealed line to control panel for continually monitoring the air pressure rise in the sealed state.

b. The equipment used to introduce the low pressure air into the sewer line shall include a safety valve or pressure relief device located in the equipment at a point which will insure that during the build-up of test pressure, the pipe line being rested will not be subjected to an internal pressure that could damage a properly installed sewer pipe.

All tests shall be conducted on the completed sewer pipe line between manholes and on the manholes individually per manhole specification.

All gauges, controls and appurtenances for equipment used to conduct the test shall be located out of manholes. Connections to the line under test, test plugs and other equipment will be made with hose or pipe extensions which will safely contain the pressures necessary to conduct and control the test.

The gage used to measure the drop in pressure shall have a 4-inch diameter face, with a scale of 0 to 15 PSI in 0.1 PSI increments, or as approved by the Engineer.

The Contractor is cautioned herein of the importance of properly installing the end caps used to plug hubs, wyes, bends, ends of laterals, and other inlets, and securing them against movement, during the installation of the sewer. Failure to take this precaution can cause a properly installed sewer pipeline to fail the low pressure air test.

The Contractor is further cautioned regarding the safety of personnel during the test, low pressure air can exert a substantial force on a test plug, even on small diameter pipe plugs. The Contractor will be responsible to insure that all test plugs utilized are in good condition and that they will not be pressurized beyond the limits recommended by their manufacturer.

No one will be permitted in a manhole containing a test plug while air is under pressure in the pipeline being subjected to the test.

- c) The following procedure shall be used in air testing:
  - i) All pneumatic plugs shall be seal tested before being used in the actual test installation. One length of pipe shall be installed on the ground and sealed at both ends with the pneumatic plugs to be used in the testing. Air shall be introduced into the plugs to be used in the testing. Air shall be introduced into the plugs to 25 psig. The sealed pipe shall be pressurized to 10 psig. The plugs shall hold against the 10 psig pressure without bracing and without movement of the plugs out of the pipe.
  - ii) After a manhole to manhole reach of pipe has been backfilled, cleaned, flushed and the pneumatic plugs tested, the test plugs shall be installed in the

pipeline being subjected to the low pressure air test and braced as necessary to secure the plugs in place and inflated to 25 psig.

The Contractor shall determine the elevation of the ground water table in the area of the pipeline being subjected to the low pressure air test, in a manner approved by the Engineer.

Utilizing the approved equipment, air at low pressure will be slowly introduced into the pipeline until the pressure within the pipeline being tested increases to 4 PSIG greater than the back pressure exerted by the ground water table over the pipe being tested, (back pressure = 1 PSIG per 2.31 feet of water). Ground water back pressure shall be determined by measuring the average height of the ground water table in feet above the invert of the section of pipe being tested. The height in feet shall be divided by 2.31 to determine the pounds of pressure that shall be added to all test pressures. For example, if the average height of ground water over the pipe invert is 11.5 feet; the pressure to be added would be 5 PSIG (11.5/2.3 = 5.01). If the water table is not at a level above the pipe, the test pressure should be brought up to 4 PSIG. Allow at least 2 minutes to elapse prior to starting the test. If necessary, allow a small amount of air to slowly enter into the pipe line in order to maintain a pressure of 4 PSIG above the back pressure due to the water table, or 4 PSIG if there is no back pressure to compensate for, and allow an additional two minute stabilization period.

After the stabilization period (3.5 PSIG minimum pressure in the pipe) the air hose from the control panel to the air supply shall be disconnected. The portion of line being tested shall be termed "Acceptable" if the time required in minutes for the pressure to decrease from 3.5 to 2.5 PSIG (greater than the average back pressure of any ground water that may be over the pipe) shall not be less than the time shown for the given diameters in the following table:

	X TEST FRESSURE DRO
Pipe Diameter In	Minutes (Minimum)
<u>Inches</u>	
4	2.0
6	3.0
8	4.0
10	5.0
12	6.0
15	7.0
18	8.5
21	10.0
24	12.0
27	13.0

Any section of pipeline which fails to meet the infiltration, exfiltration or low pressure air tests, including manholes will be repaired or replaced as necessary by the Contractor and retested, at no additional expense to the Owner.

The Contractor will be responsible for all costs, and de-installs incurred due to efforts to locate and repair any leaks in any sewer pipeline which fails the required tests, regardless of whether the failure is due to workmanship, material failure, the result of an improperly installed or braced end cap; or any sewer line damaged due to failure to provide a properly sized and operable safety valve or pressure release device, on the testing equipment for protection of the pipe being tested.

No sewer line will be considered acceptable until is successfully passes the requirements of these tests.

All testing will be conducted by the Contractor in the presence of the Inspector. The Contractor shall keep a written record which will show the results of the tests conducted. The record should include sufficient data on length of line, pressure levels, time for pressure drop, and related features noted during the testing of each segment of the line. A copy of this record shall be given to the Engineer/Owner.

# I) Connections and Provisions for Connections

a) Outlets, laterals, stubs, clean-outs, connection chimneys, etc. required to connect existing sewers to the new sewer or to provide for future connections shall be furnished and set where and as indicated on the Contract Drawings or as ordered by the Engineer. Since the number required or their locations cannot be fully determined in advance, the actual number and exact locations shall be determined as the work progresses. The Contractor shall be responsible for determining the location of all existing connections and reconnecting the same to the new sewer. The number and location for future connections shall be determined by the Engineer. Where they are set by the Contractor solely for his own convenience for temporary connections, temporary drainage, or to maintain existing flows even if set with the permission and approval of the Engineer, they will not be paid for.

# i. Capped Outlets (Wyes and Tees)

Unless otherwise shown or specified or ordered by the Engineer: all capped outlets for PVC pipe (mainline sewer) shall consist of wyes with appropriate 45/30 degree bends to form a right angle with the sewer; for RCP or DIP (mainline sewer) the outlet shall be a tee; tee outlets on RCP shall be flexible watertight pipe to pipe tee connectors for outlet diameters up to 10 inches (nominal) and RCP bells for outlet diameters over 10 inches nominal; minimum outlet size shall be 6 inches; outlets in sheeted trenches shall be extended to the trench edge with appropriate "shorts" (with a bell end) and the

sheeting cut and removed at the outlet; and all outlets shall be capped and marked as elsewhere herein specified.

#### ii. Laterals

Capped Laterals - shall be installed to permit the future connection of house/building sewers. They shall be of the type and size (6 inch min.) specified and installed to the grade and to the point shown on the Contract Drawings, specified herein, as required to serve an existing house/building, or as ordered by the Engineer. They will not be installed on a grade flatter than one percent, and will usually have 8 feet of cover at the curb or street line in most residential streets or zones. On business streets, or streets adjacent to the business section of the city, or where the adjacent land is low, they will have not less than 10 feet of cover at the curb, if possible.

Unless otherwise directed, the entire lateral trench shall be excavated to the required grade before any pipe is installed therein to confirm setting of the lateral at the required invert elevations without conflict, or to allow for grade adjustment.

Care shall be taken to make smooth, closefitting joints. Pipes shall be trimmed or extra bends used (when ordered) for this purpose. All requirements for installation, as described elsewhere herein, shall be observed in installation capped lateral, insofar as those requirements apply. All capped laterals shall terminate with a "bell" end which shall be closed with a cap/plug before being placed in the trench and marked, as described elsewhere herein.

Capped laterals shall extend from a manufactured outlet set in the main line sewer which outlet shall conform to the applicable requirements herein for capped outlets.

Reconnection Laterals - shall be installed to permit the connection of existing house/building sewers to the new sewer and shall be of the type and size (6 inch min.) specified.

The reconnection lateral shall be connected to the main line sewer in accordance with the following:

<u>For DIP (main sewer)</u> the connection shall be made to a plant manufactured unit with the provision for connection formed integrally therewith or by burning an opening of the appropriate size in the pipe and brazing thereto a "m-D Cut-In Connection" in accordance with the manufacturer's recommended installation procedures, the details shown on the Contract Drawings or as directed by the Engineer. The "M-D Cut-In

Connection" shall be encased with a concrete collar in accordance with the details shown on the Contract Drawings or as directed.

<u>For PVC (main sewer)</u> the connection shall be made by cutting an opening of appropriate size through the wall of the pipe and installing, by solvent welding, thereover a saddle type fitting as supplied by the pipe manufacturer in accordance with recommended installation procedures, the details shown on the Contract Drawings or as directed by the Engineer.

For R.C.P. (main sewer) less than 30 inches in diameter, the connection shall be made to a manufactured unit having the outlet formed integrally therewith by the pipe manufacturer or as prefabricated by the Contractor the job site (not in the trench) at least 2 days prior to its intended use in accordance with the recommendations of the pipe manufacturer, as shown on the Contract Drawings or directed by the Engineer.

For R.C.P. sanitary and storm water sewers the pipe to lateral connection shall be made by core-drilling the required 6" hole and installing a flexible watertight pipe to pipe connector in the field at each house lateral. The equipment used shall be a Core Drill and water tight Tee connectors.

The connector shall be the sole element relied to assure flexible watertight seal at the location where the two pipes are connected. No adhesives or lubricants shall be employed in the installation of the connector. The rubber for the connector shall comply with ASTM C443, be of molded one-piece construction, shall be 3/8" (9.4 MM) thick or greater and consist of EPDN and Neoprene or elastometers designed to be resistant to ozone, weather elements, chemical including acids, alkalis, animal and vegetable fats, oils and petroleum products from spills.

The connector shall be installed in the wall of the pipe by activating the expanding mechanism in strict accordance with the recommendation of the connector manufacturer.

All stainless steel elements of the connector shall be totally non-magnetic series 304 stainless including the worm screw assembly for tightening the steel band around the pipe. The worm screw for tightening the stainless steel band shall be torqued by a break-away torque wrench set for 60-70 inch/lbs.

The connector shall be of a size specifically designed so as not to protrude more than 1/8" inside the pipe. The connector shall contain an internal shoulder which shall act as a stop for the incoming lateral.

For R.C.P. (main sewer) larger than 30 inches in diameter, the connection shall be made in accordance with e. above or to the pipe in the trench in accordance with the details shown on the Contract Drawings or as directed by the Engineer.

# iii) Stubs

Stubs constructed from manholes or structures for future use shall be as indicated on the Contract Drawings or as ordered by the Engineer and shall be capped/plugged as specified elsewhere herein.

# iv) Connection Chimneys

Connection chimneys shall be constructed to facilitate making connections to the sewer where the sewer is in deep cut, either for connections installed under this Contract or for future use. All pipe and fittings shall be well lined up and fitted together. The vertical pipe and lower half of bends shall be precast or cast-in-place surrounded with and embedded in a pier of concrete as shown on the drawings. When the chimney is complete except for the top cap, a pole or rod shall be run down through the chimney from the top to the invert of the sewer below in the presence of the Engineer to make sure the chimney is clean and without obstructions and to measure the actual "as-built" height of chimney. Thereafter a cap shall be set in the upper, or straightaway end of the pipe forming the top of the chimney, and secured into place.

#### v) Caps/Plugs

Unless otherwise specified or approved by the Engineer, all caps/plugs for sealing outlets, laterals, stubs, connection chimneys, etc. shall be manufactured units set in the bell in accordance with the manufacturer's recommended installation procedures as approved by the Engineer.

All caps/plugs shall be installed such that their removal in the future can be made without damage to the bell and they shall be capable of withstanding the maximum anticipated head during exfiltration testing.

- b) Sheeting shall be cut away and removed in front of all capped outlets, laterals, stubs, connection chimneys, etc.
- c) Markers at Capped Outlets, Capped Laterals, Stubs, etc.

The Contractor shall provide that, a piece of #8 reinforcing rod (1") will be set vertically and left in place, extending from a point directly in front of but not in contact with the outer end of a capped outlet, capped lateral, etc., to a point about 2 feet below the ground surface or finished grade to guide persons who in the future

years may have occasion to excavate to find the outlet, lateral, stub etc. and to protect the same from damage then making such excavation.

Where an existing pipe is to be replaced or re-installed, the new pipe shall be of the same type as the existing pipe, if the existing pipe is RCP, PVC or DIP. In all other cases the existing pipe shall be replaced with PVC. All replacement pipes should conform to requirements of 3.03.02. In no case shall a building connection be less than 6" in size.

All catch basin connections shall have a minimum grade of 1.0% and a minimum cover of 2'-0" unless otherwise approved. All other pipe shall have a minimum grade of 1.0%.

Where replaced or reinstalled sewer is to be connected to an existing City sewer, the Contractor shall obtain any permits necessary from the City prior to starting work.

When connecting to an existing sewer, every effort shall be made to connect the new pipe to an undamaged spigot or bell end of the existing pipe. If necessary, the new pipe should be installed progressing in a downstream direction. When making the connection to an existing spigot, a concrete collar shall be poured around the pipe to make the joint watertight or use of a elastomeric rubber sleeve with stainless steel clamps shall be allowed.

If it is not possible to connect to an existing joint as determined by the Engineer, connection shall be made with a concrete collar or by the use of an elastomeric rubber sleeve with stainless steel clamps (i.e. Fernco Flexible couplings or equivalent).

As necessary, the Contractor shall provide the necessary fittings and adapters to effect connection to existing pipes.

When connecting the new line to an existing manhole, the connection to the structure shall be watertight, smooth and at the same elevation as the existing manhole channel and to the approval of the Engineer.

**Method of Measurement:** Measurement for payment will be that actual number of linear feet of pipe of the appropriate size, complete and accepted, measured in place, through all wyes, tees, elbows, etc., along the centerline of the pipe from center line of manhole to center line of manhole, with the interior diameter of the manholes deducted from the measurement.

**Basis of Payment:** This work will be paid for at the Contract price per linear foot of the appropriate size pipe, complete and accepted in place. The unit price shall include the cost of all permit fees, removal of existing pipes and structures, cutting and plugging of existing sewer pipes, furnishing and installation all pipe and pipe fittings, connection to new or existing pipes or structures including brick and mortar, non-shrink grout, reinforced concrete collars, geotextile,

core-drilling, flexible couplings, testing, cleaning and labor, equipment and materials incidental thereto, and the T.V. inspection, Joint Testing and Sealing and video tape or DVD as required.

Excavation and Bedding Material will be paid under appropriate items.

Wyes, tees, elbows and other fittings will not be paid separately but will be measured as described in 3.03.04 above. Payment for wyes, tees or other fittings shall be included in the LF price of sanitary or storm sewer on which they are installed and shall include the cost of furnishing and placing caps and "O" ring gaskets to seal off connections that are placed for future use, all 3/4" stone bedding, foundation stone (approximately two cubic feet of 3/4" crushed stone for each wye or tee).

Class "A" Concrete will be measured and paid in conformance with Section 4.01 of these specifications.

Pay Item	<u>Pay Unit</u>
15" R.C. Pipe	LF
18" R.C. Pipe	LF
24" R.C. Pipe	LF
6" Polyvinyl Chloride Pipe	LF
12" Polyvinyl Chloride Pipe	LF

# ITEM #0811001A – CONCRETE CURBING ITEM #0811002A – SPECIAL CONCRETE CURBING ITEM #0921001A – CONCRETE SIDEWALK ITEM #0924006A – CONCRETE DRIVEWAY RAMP ITEM #0924007A – CONCRETE DRIVEWAY RAMP (COMMERCIAL)

- **4.03.01 Description:** The work covered in this section consists of all equipment, labor, and materials necessary for constructing concrete curbing, sidewalk, driveway ramps, and pedestrian ramps in conformance with the lines and grades shown on the plans, and the thicknesses, cross sections, and details of the standard drawings or as established by the City Engineer. All work must be completed under the supervision of and to the satisfaction of the Board of Public Works and the City Engineer.
- **4.03.02 Materials:** Material shall be furnished in accordance with the requirements of NB Standard Specifications Sections 4.01 and 4.02 except as hereinafter amended, supplemented, or restricted.

#### A) General

- 1) Concrete type shall be Class "C", as defined in CTDOT Standard Specifications, Section M.03. Minimum concrete compressive strength shall be 1800 psi at seven days and 3000 psi at twenty-eight days.
- 2) Preformed Expansion Joint Material shall conform to the requirements of CTDOT Standard Specifications, Section M.03-7.
- 3) Welded Wire Fabric shall be 6x6 W1.4.
- 4) Processed Aggregate Base shall conform to the requirements of CTDOT Standard Specifications Section M.05.01.
- 5) Paint shall conform with the requirements of CTDOT Standard Specifications, Section M.07.20.
- 6) Detectable Warning Surface shall comply with current ADA requirements.
- B) Cement only type II Portland Cement shall be used in batching the concrete for these items.
- C) Construction Testing Unless otherwise agreed to in writing or amended by City of New Britain Contract Special Conditions, a reasonable amount of testing shall be ordered on an "as needed" basis by the City Engineer. This testing will be performed at the City's expense. If initial testing results indicate that the specifications have not been met, additional testing will be

ordered by the City Engineer. This additional testing shall be at the Contractor's expense and shall be continued until such time as the test results indicate conformance is being achieved.

At the request of the City Engineer, the Contractor shall be required, at his expense, to submit certified test reports in accordance with CTDOT Standard Specifications, Section 1.06.07 for any materials incorporated into the work. Failure or refusal to comply shall be deemed as grounds for immediate removal of subject materials and replacement with materials for which such reports and certificates can be provided, all at the Contractor's expense.

The City reserves the right to perform, at any time with its own forces and at its own expense, such additional testing as it may deem necessary.

**4.03.03 - Construction Methods:** Construction methods shall conform with Section 4.01.03 of the NB Standard Specifications except as hereinafter amended, supplemented, or restricted.

# A) All Items of Work

#### 1) Excavation and Grading

- a) The subgrade shall be excavated or filled with suitable material to the required grades and lines. Filled sections shall be compacted and extend a minimum of one foot (1') outside the form lines. The subgrade shall be compacted to a dry density of at least 90% of maximum dry density as determined by AASHTO T-180, Method D. The finished surface of the subgrade shall be smooth, free from surface irregularities and true to line and grade as established by grade hubs or pins.
- b) Where spongy, organic or otherwise unsuitable material is encountered, which, in the opinion of the City Engineer, is unsuitable for subgrade, such unsuitable material shall be removed to the depth specified by the City Engineer, and replaced with acceptable material. All such replacement material shall be compacted to a dry density of at least 90% of maximum dry density for the material used as determined by AASHTO T-180, Method D. Any boulders encountered shall be removed for one foot laterally and six inches vertically below all concrete. In no case shall concrete be placed on a saturated base/subgrade or if free water is standing on the base/subgrade.
- c) The correct cross sections of the base/subgrade shall be checked before the concrete is placed by testing with a template of wood or metal, the bottom surface of which conforms to the desired contour. Any irregularities thus indicated shall be corrected.
- d) The contractor shall, upon removing traffic signs to facilitate sidewalk installation, note the exact locations of the signs and the number of poles supporting each sign. During construction of the sidewalk, the contractor shall install galvanized steel or PVC (Schedule 40) pipe having a minimum 3 ½" inner diameter (ID) and a maximum 4" ID at the sign pole locations. The top of the pipe shall be flush with sidewalk grade and shall extend a minimum of 3" to a maximum of 5" into the processed gravel base.

Construction joints shall be made in the concrete at 90 degree increments around the pipe run perpendicular and parallel to the curbing line and extending until they intersect with another construction joint or an expansion joint. The poles shall not be cemented in place.

# 2) Setting Forms

- a) All forms shall be of wood or metal, straight, free from warp and of sufficient strength when staked to resist the pressure of the concrete without springing, and the upper edge shall form a true line. All forms shall be cleaned thoroughly and greased or oiled before concrete is placed against them. Forms that have become worn, bent, or broken shall not be used.
- b) Sufficient support shall be given to the form to prevent movement in any direction during concrete placement or as a result of the weight of the concrete. Forms shall not be set until the base/subgrade has been prepared in accordance with these specifications and compacted within one inch (1") of the established grade. When set, the top of the form shall not depart from grade more than one-quarter inch (1/4") when checked with a tenfoot (10") straightedge. The alignment shall not vary more than one-half inch (1/2") in ten feet (10"). Immediately prior to placing the concrete, forms shall be carefully inspected for proper grading, alignment and rigid construction. Adjustments and repairs as needed shall be completed before placing concrete.
- c) The Contractor shall provide an approved metal straight edge, ten (10) feet in length for use in checking the alignment of the forms prior to placing the concrete and also to check the concrete surface during the finishing operation.
- d) On short radii curves, steel plates or wood which can be readily formed to the desired radii shall be used. Face forms, if used, shall be preshaped to the proper radii. Care shall be exercised to insure conformance with the required cross-section around the entire radius during concrete placement and curing operations.

#### 3) Placing

#### a) General

Concrete may be placed by an approved slipform/extrusion machine, by the formed method, or by a combination of these methods.

# b) Formed Method

i) Before the concrete is placed, the base/subgrade shall be thoroughly dampened so that it is moist throughout, but without puddles of water.

- ii) The concrete shall be placed only on a moist base. Concrete shall not be placed on a soft, muddy or frozen base.
- iii) Concrete shall be placed as near to its final position as practicable. Precautions shall be taken not to overwork the concrete while it is still plastic.
- iv) The concrete shall be thoroughly spaded along the forms to eliminate voids or honeycombs at the edges.
- v) The rate of concrete placement shall not exceed the rate at which the various placing and finishing operations can be performed in accordance with these specifications.
- vi) The concrete shall be properly placed in forms which are securely set to line and grade, and shall at no time deviate more than ¼" from an accurate straight edge ten (10) feet in length. The operations of depositing and compacting the concrete shall be so conducted that the concrete shall be smooth and dense, free from honeycomb and free from pockets of segregated aggregate. At the end of the day, or in case of an unavoidable interruption of more than thirty (30) minutes, a transverse construction joint shall be placed at the point of stopping work, provided that the section on which work has been suspended is not less than the minimum length for that particular item or work. Sections less than the minimum length shall be removed. Concrete shall not be placed when weather is stormy, dusty, or otherwise inclement to the point that it precludes good workmanship. Air temperature shall be a minimum of 40 degrees F. and rising when the pour is started unless specific provisions are made for cold weather concreting in accordance with Section 4.01.

#### c) Machine Method

The slipform/extrusion machine approved shall be so designed as to place, spread, consolidate, screed, and finish the concrete in one complete pass in such a manner that a minimum of hand finishing will be necessary to provide a dense and homogeneous concrete section. The machine shall shape, vibrate, and/or extrude the concrete for the full width and depth of the concrete section being placed. It shall be operated with as nearly a continuous forward movement as possible. All operations of mixing, delivery, and spreading concrete shall be so coordinated as to provide uniform progress, with stopping and starting of the machine held to a minimum.

#### 4) Jointing

a) Expansion joints shall be constructed straight, plumb, and shall extend through the entire section from top to bottom and from edge to back. Preformed expansion joint filler, one-half inch thick, meeting the requirements of Section 4.01, shall be used to form transverse expansion joints. Expansion joints shall be constructed at the intersection with

any existing unyielding structures, concrete or stone structure, at the tangent point of curbing radii, and at intermediate intervals as specified for the item of work.

- b) Expansion joints in slipformed curbing or walk shall be constructed with an appropriate hand tool by raking or sawing through partially set concrete for the full depth and width of the section. The cut shall be only wide enough to permit a snug fit for the joint filler.
- c) After the filler is placed, open areas adjacent to the filler shall be filled with concrete and then troweled and edged.
- d) Alternately, an expansion joint may be installed by removing a short section of freshly extruded curbing and gutter immediately, installing temporary holding forms, placing the expansion joint filler, and replacing and reconsolidating the concrete that was removed. Contaminated concrete shall be discarded.
- e) As required at the end of day's run, construction joints shall be made at right angles to the longitudinal axis and shall be located at the regular spacing designated for block joints unless otherwise specifically permitted by the City Engineer. In no case shall any length of walk be less than five (5) feet between joints or any length of curbing less than six (6) feet.

# 5) Finishing

- a) No finishing operation shall be performed while free water is present. Finishing operations shall be delayed until all water and water sheen has left the surface and the concrete has started to stiffen.
- b) After water sheen has disappeared, edging operations, where required, shall be completed.
- c) After edging and jointing operations, the surface shall be floated with either a wood or a magnesium float.
- d) If necessary, tooled joints and edges shall be rerun after floating to maintain uniformity.
- e) All honeycombed areas or small defects discovered while concrete is still fresh and has not "set" shall be properly pointed up with 1:2 mix mortar.
- f) Face forms, if used, shall be left in place until the concrete has hardened sufficiently so that they can be removed without injury to the curbing. The exposed surfaces shall then be finished smooth and even by means of a moist wood float or a moist brick.

g) Any person who shall construct curbing or walks shall stamp his company name and date of construction at the beginning and end of each days pour so that it shall be legible and visible. Similar stamps should appear in each pedestrian ramp or driveway apron when done by separate pour.

# 6) Stripping Forms

- a) Forms shall remain in place at least twelve (12) hours after concrete has been placed against them or for a longer period if so directed by the City Engineer. Crowbars or other heavy tools shall not be used against green concrete in removing the forms.
- b) Forms may be removed at such time as the concrete is sufficiently set that removal will be without danger of chipping or spalling. When forms are removed before the expiration of the curing period, the edges of the concrete shall be protected with moist earth, or sprayed with curing compound. All forms shall be cleaned, oiled and be examined for defects before they are used again.
- c) Honeycomb, voids, and surface irregularities are unacceptable and must be corrected by removal of the defective work and replacement. The Contractor may propose correction of the deficient work by means other than removal and replacement. Any attempt at alternative correction must be approved and authorized by the City Engineer, who shall set the specific terms under which the corrective work will be allowed.

# 7) Backfilling

- a) Existing bituminous or concrete pavement between the curb and sidewalk shall be removed as indicated on the plans or as directed by the Engineer prior to backfilling. The existing ground between the curb and sidewalk shall be filled and/or graded to provide a straight slope between the top of curb and edge of sidewalk. Where lawns or bare soil exist or where bituminous or concrete pavement has been removed, the top four (4) inches, of the entire area between the curb and sidewalk shall be removed and backfilled with black loam or good topsoil which is suitable for the growth of lawns. It shall also be placed out from the sidewalk and driveway ramps in all other areas a sufficient distance. All disturbed areas shall be seeded or sodded and maintained. Excess material shall be removed and disposed of.
- b) Where lawns do not exist, the top four inches (4") of backfill shall be tamped earth and shall be placed to conform with the typical sections shown on the plans.
- c) Backfill shall be compacted to prevent settlement and the surface shall be leveled off to a neat appearing and free draining surface.

# B) Additional Requirements for Curbing

#### 1) Placing

#### a) General

Concrete may be placed by an approved slipform/extrusion machine, by the formed method, or by a combination of these methods.

# 2) Jointing

# a) Formed or Slip Formed Curbing

Curbing constructed by the formed method or slipform machine shall be constructed in sections not less than 6 feet and not more than 20 feet. Non-protruding expansion joints ½ inch thick by the width and depth of the curbing shall be placed at a maximum of 20 feet apart. Only the non-extruding expansion joint of the specified type shall be used and shall be placed so the top of the joint will be flush with the top of the concrete.

# b) Jointing New and Existing Curbing Sections

Where the new curbing sections will join existing curbing with a different cross-section, a minimum six (6) foot long transition section shall be constructed. An expansion joint shall be placed at both ends of the transition section.

# 3) Backfilling

- a) After the concrete has set sufficiently and prior to pavement repair, if any, the spaces in back of curbing shall be refilled with suitable material to the required elevations. The fill material shall be thoroughly tamped in maximum 6" thick layers.
- b) During backfill and paving, the Contractor must keep curbing aligned and protected from damage. No extra payment will be made for realignment or for replacement of cracked or otherwise damaged curbing.
- c) On all pavement repair, the base shall be satisfactorily compacted by tamping or rolling; and the surface course shall be compacted to a smooth even surface, flush with the adjacent pavement with an approved roller. Prior to placing the bituminous concrete, the edges of the existing bituminous shall be satisfactorily brushed or mopped with a liberal application of hot liquid asphalt or emulsified asphalt. After placing and compaction of the bituminous concrete, the joint between the existing and the new bituminous concrete shall be satisfactorily coated and sealed with hot liquid asphalt or emulsified asphalt and dusted with fine sand to prevent tracking.

#### C) Additional Requirements for Sidewalk, Driveway Ramps and Pedestrian Ramps

#### 1) Excavation And Grading

The concrete shall be placed on a six (6) inch thickness of processed aggregate compacted to 95% of the maximum dry density at optimum moisture as determined by AASHTO T-180, Method D.

# 2) Reinforcing Steel

Welded wire fabric ends and sides shall overlap no less than one mesh and shall be fastened by wires at intervals not to exceed one foot.

# 3) Jointing

- a) All concrete walks under 7 feet in width must be laid in sections not to exceed 20 feet in length and shall be separated with a strip of non-protuding expansion joint ½" thick and the full depth of the concrete set flush with the finished surface.
- b) All concrete walks over 7 feet wide must be laid in sections not to exceed 15 feet in length and shall be separated with a strip of non-protruding expansion joint ½" thick and the full depth of the concrete set flush with finished surface.
- c) All walks shall be marked with construction joints in 5 foot blocks with each section marked so as to give the appearance of separate blocks. These construction joints shall have a uniform depth one quarter of the thickness of the concrete.
- d) In full concrete walks between the curbing and any building there shall be placed a strip of expansion joint filler ½" thick (¼" for granite curbing) and the full depth of the concrete set flush with the finished surface on or about the street line.
- e) All saw cuts shall be in neat straight lines where proposed meets existing construction or as directed by the City Engineer. Place an expansion joint at each saw cut. Saw cut shall be completely through the concrete.
- 4) Detectable Warning Surface shall consist of raised truncated domes with a diameter of nominal 0.9 in, a height of nominal 0.2 in and a center-to-center spacing of nominal 2.35 in and shall contrast visually with adjoining surfaces, either light-on-dark, or dark-on-light. Installation shall comply with current ADA requirements.

#### 5) Finishing

# a) Broomed Finish

The surface of concrete shall be finished true to the lines and grades shown on the plans. Concrete shall be worked until the coarse aggregate is forced down into the body of the concrete and no coarse aggregate is exposed. Concrete that is adjacent to forms and formed joints shall be edged with a suitable edging tool to the dimensions shown on the

plans. The surface shall than be floated with a wooden or other suitable float to a smooth and uniform surface. If necessary, tooled joints and edges shall be rerun after floating to maintain uniformity. When the concrete has hardened sufficiently, the surface shall be given a broom finish using a soft-bristled, long handled push broom. The strokes shall be square across the concrete from edge to edge with adjacent strokes overlapped. Strokes shall be made without tearing the concrete. The broomed finish shall produce regular corrugations not over one-eighth inch (1/8") in depth.

#### 6) Backfilling

After the forms have been removed suitable fill material shall be placed along the edge of the walk and tamped by either hand or mechanical tampers to a density at least equal to that of the adjacent ground. The finish grade and section shall be as indicated on the drawings and to the satisfaction of the City Engineer.

# D) Protection

The Contractor shall always have materials available to protect the surface of the plastic concrete against rain. These materials shall consist of waterproof paper or plastic sheeting. For slipform construction, materials such as wood planks or forms to protect the edges shall also be required.

Upon completion, all items of work under this specification shall be protected from travel and/or adjacent construction operations (e.g. paving) for a time sufficient to insure they are not damaged, but in no case for less than 72 hours.

#### E) Tolerances

The work shall be performed in a manner which results in the item being constructed true to line and grade, uniform in appearance and structurally sound. Items found with unsightly bulges, ridges, low spots or other defects shall be removed and replaced at the Contractor's expense if the City Engineer considers them to be irreparable. When checked with a ten foot (10') straightedge, grade shall not deviate by more than one-quarter inch (1/4") and alignment shall not vary by more than one-half inch (1/2").

#### F) Warranty

All concrete sidewalks, curbing, driveway ramps and pedestrian ramps constructed shall be guaranteed for a period of one (1) year, said period to commence at the time of official acceptance.

#### 4.03.04 - Method of Measurement:

Concrete Sidewalks, Driveway Ramps and Pedestrian Ramps: This work will be measured for payment by the actual number of square feet of completed and accepted concrete

88-185 ITEM NO. 0811001A ITEM NO. 0811002A ITEM NO. 0921001A

ITEM NO. 0924006A ITEM NO. 0924007A sidewalks, driveway ramps or pedestrian ramps. This measurement should not include the curbing area, for either separate or monothic sidewalk or driveway ramp.

Concrete Curbing: This work will be measured for payment by the actual number of linear feet of completed and accepted concrete curbing. This measurement should include the curbing, either separate or monolithic, along sidewalk or driveway ramps.

# **4.03.05 – Basis of Payment:**

#### A) General

- 1) The unit prices for all items of work shall include the cost of all saw cuts to meet existing facilities, the cost of removing and disposing of all surplus material, excavation, preparation of subgrade and base, base material, concrete (including additives), formwork, welded wire fabric, jointing, shoring, backfill, restoration of adjacent pavement and grassed areas, painting and cross walk adjustment, and all other labor, equipment, and material incidental or necessary to complete the item in accordance with the plans and specifications.
- 2) Unless otherwise specified, there will be no direct payment for adjusting to grade monuments, valve boxes, vaults, manhole frames and covers, hatchways, or other existing surface structures in any new or reconstructed walk, the cost of this work being considered to be included in the unit price for the item of work.
- 3) Openings in walk for tree wells and planters shall be determined prior to the start of construction. No additional payment for extra formwork, etc. occasioned by these features shall be made, the cost of this work being considered to be included in the unit price for the item of work.

#### B) Sidewalk and Pedestrian Ramps

Standard concrete walk, including monolithic walk and concrete pedestrian ramps, shall be paid for at the contract unit price per square foot for "Concrete Sidewalk", which price shall include the cost of all scoring and joints, as specified. When the walk is poured contiguous with concrete curbing, the top width of the curbing (8") shall not be used to compute the payment area of the walk. The price shall also include furnishing and installing an ADA compliant detectable warning surface.

# C) Curbing

Concrete shall be paid for at the contract unit price per linear foot for "Concrete Curbing". Curbing shall include the New Britain standard curbing, recessed curbing, recessed curbing in driveway aprons, and the curbing in monolithic walks and pedestrian ramps.

# D) Driveway Ramps

Driveway ramps shall be paid for at the contract unit price per square foot for "Concrete Driveway Ramp" or "Concrete Driveway Ramp (Commercial)", as measured along the exposed face of the curbing from the P.C. of the driveway radius. The top width of the recessed curbing (8") shall not be used to compute the payment area of the driveway.

Pay Item	<u>Pay Unit</u>
Concrete Curbing	LF
Special Concrete Curbing	LF
Concrete Sidewalk	SF
Concrete Driveway Ramp	SF
Concrete Driveway Ramp (Commercial)	SF

- ITEM #0949000A WOOD CHIP MULCH
- <u>ITEM #0949131A SYRINGA RETICULATA, "IVORY SILK" JAPANESE</u> TREE LILAC 3" – 3 1/2" CAL. B.B.
- <u>ITEM #0949146A QUERCUS RUBRA, NORTHERN RED OAK, 3" 3</u> 1/2" CAL. B.B.
- ITEM #0949164A MALUS "RED JEWEL", RED JEWEL CRABAPPLE 3"
   3 1/2" CAL. B.B.
- ITEM #0949165A CARYA OVATA, SHAGBARK HICKORY, 3" 3 1/2" CAL. B.B.
- <u>ITEM #0949356A PRUNUS SERRULATA KWANZAN CHERRY 3" 3 1/2" CAL. B.B.</u>
- ITEM #0949446A BUXUS SEMPERVIRENS, "AMERICAN BOXWOOD"

  CLASSIC, 3 GALLON CONTAINER
- ITEM #0949834A ACER RUBRUM RED MAPLE 3"- 3 1/2" CAL. B.B.

  ITEM #0949852A ACER SACCHARINUM SILVER MAPLE 3" 3 1/2"

  CAL. B.B.
- **9.49.01—Description:** The work under these items shall consist of furnishing, planting and mulching trees, shrubs, vines and ground cover plants of the type and size indicated on the plans or special provisions. It shall also include all incidental operations, such as the care of the living plants and the replacement of dead and unsatisfactory plants or unsatisfactory materials before final acceptance of the contract.
- **9.49.02**—**Materials:** The material for this work shall conform to the requirements of Form 816: State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges, and Incidental Construction, Section M.13.07.
- **9.49.03**—Construction Methods: Construction methods shall be performed in accordance with these specifications. The Contractor is cautioned that within the limits of any project, buried cable for illumination or utilities, which may be energized, may be present.

088-185

ITEM NO. 0949000A

ITEM NO. 0949131A

ITEM NO. 0949146A

ITEM NO. 0949164A

ITEM NO. 0949165A

ITEM NO. 0949356A

ITEM NO. 0949446A

ITEM NO. 0949834A

ITEM NO. 0949852A

1. Planting Season: Unless otherwise shown on the plans or directed by the Landscape Architect, the planting seasons shall be those indicated below. No planting shall be done in frozen ground or when snow covers the ground, or the soil is otherwise in an unsatisfactory condition for planting.

#### **Deciduous Material**

**Spring:** March 1st to May 1st (inclusive) except for balled and burlapped material, the planting of which will terminate on May 15th.

**Fall:** From October 15th until the ground freezes. Such plant items, as may be designated elsewhere in the contract documents, shall be planted in the spring planting season only.

# **Evergreen Material**

**Spring:** March 1st to June 1st (inclusive). **Fall:** August 15th to October 1st (inclusive).

- 2. Protection: Plants received by the Contractor shall be kept moist, fresh and protected against exposure to sun, wind and freezing temperatures whether in the receiving yard, in transit, while being handled or in temporary storage on the job site awaiting planting. Bare-root plants, which are not planted immediately upon receipt, shall be heeled-in in trenches with the bundles opened, the plants separated and all roots covered so as to leave no air spaces. Balled and burlapped plants shall have their earth balls covered by earth, wood chips, cloth, straw or other suitable material which shall be kept moist.
- **3.** Layout: Plant material locations and bed outlines shall be staked on the project site by the Contractor in the presence of the Engineer before any plant pits or beds are excavated. Labor, equipment and new, smooth stakes of approved quality are to be furnished by the Contractor.
- **4. Excavation:** Excavation for planting beds and pits shall conform to the approved staked locations and outlines. The latter shall be neatly formed by means of spades or other approved tools. All sod, weeds, roots and other objectionable material excavated from the plant beds or pit sites which are unsuitable for backfill shall be removed from the site immediately and disposed of by the Contractor in a manner satisfactory to the Landscape Architect.

The Contractor at his option may apply, prior to excavating plant pits in designated planting bed locations, at no expense to the City of New Britain, a post-emergent aqueous spray treatment of Glyphosate (isopropylamine salt of glyphosate) 41% acid equivalent (ae) to the existing bed

088-185

ITEM NO. 0949000A ITEM NO. 0949131A ITEM NO. 0949146A ITEM NO. 0949164A ITEM NO. 0949165A ITEM NO. 0949356A ITEM NO. 0949446A ITEM NO. 0949834A ITEM NO. 0949852A vegetation in accordance with the manufacturer's recommendations for perennial vegetation control, instead of excavating the planting bed.

A minimum of fourteen (14) days post application, or when the perennial species shows the visible effects of the treatment, the Contractor shall mow, at no expense to the City of New Britain, all treated bed areas to a maximum height of 4 inches.

Plant pits may then be excavated, and the excavated soil and vegetative debris shall then be immediately removed from the project site.

In landscape areas following the excavation of the pits, but before the installation of plant material, the remaining turf grasses and unwanted vegetation shall be sprayed, unless otherwise directed by the Landscape Architect, with Glyphosate at the manufacturer's recommended rate.

- **5. Pits:** The pit diameters shall be twice the diameter of the root-spread or container diameters, and shall be 2- inches less than the height of the rootball measured from the bottom of the ball to the root collar. (i. e. A 12-inch measurement between the root collar and the bottom of the rootball will require a 10-inch deep pit). Any excavation in excess of that required shall be replaced with planting soil and compacted to the satisfaction of the Landscape Architect.
- **6. Obstructions Below Ground:** Any rock or underground obstruction shall be removed to the depth necessary for planting as specified, unless other locations for the planting are approved by the Landscape Architect. If removal of obstructions results in a deeper hole than needed for planting, backfill material shall be added and compacted to the satisfaction of the Landscape Architect.
- 7. Backfill: Backfill shall conform to M.13.02-1 Planting Soil.
- **8. Setting Plants:** All plants shall be plumb and at a level that is 2-inches higher than the surrounding ground. Backfill material for all plants shall be thoroughly and properly settled by firming or tamping. Thorough watering shall accompany backfilling. Saucers capable of holding water shall be formed at individual plants (exclusive of plant beds) by placing ridges of planting soil around each, or as directed by the Landscape Architect.
  - **a.** Balled and Burlapped plants: Plants shall be handled in such manner so that the soil will not be loosened from the roots inside of the ball. Carefully place the plant into the

088-185

ITEM NO. 0949000A ITEM NO. 0949131A ITEM NO. 0949146A ITEM NO. 0949164A ITEM NO. 0949165A ITEM NO. 0949356A ITEM NO. 0949446A ITEM NO. 0949834A ITEM NO. 0949852A prepared pits and backfill with planting soil to one - half the depth of the pit, thoroughly tamp to the satisfaction of the Landscape Architect around the ball. Fill the remaining area of the pit with water. Once water has completely drained, loosen the burlap and peel down the top one third. If wire baskets are used, remove the basket. Roots that have been wrapped around the ball within the burlap shall be straightened and the remainder of the pit filled with planting soil tamped to ensure that no air pockets remain.

- **b.** Container Grown Plants: Carefully remove the plant from the container over the prepared pits. Gently loosen the soil and straighten all roots as naturally as possible. Place into the bottom of the pit. Backfill with planting soil to one half the depth of the pit. Thoroughly tamp to the satisfaction of the Landscape Architect. Fill remaining area of the pit with water. Once water has completely drained fill the remainder of the pit with planting soil tamped to ensure that no air pockets remain.
- 9. Fertilizing: Landscape shall be fertilized at the rate of 3 pounds per 100 square feet of surface area (broadcast). The fertilizer shall be uniformly applied to the surface of the beds and worked into the upper 2 inches of soil. Individual trees shall be fertilized at the rate of 2 pounds per inch of trunk diameter, and the fertilizer shall be mixed into the upper 2 inches of soil. A second application of fertilizer shall be applied to all plant items at the same specified rates over the triple shredded hardwood mulch at the end of the period of establishment.
- **10. Watering:** All plants shall be watered upon setting and as many times thereafter as conditions warrant.

The following is a guide for minimum requirements:

```
Trees:
```

2 ½" Caliper and less – Fifteen (15) gallons each.

3" to 5" Caliper – Twenty (20) gallon each.

5 ½" Caliper and above – Twenty-five (25) gallon each.

#### Shrubs:

24" and less – Six (6) gallons each.

More than 24" – Ten (10) gallons each.

Perennials and Ornamental Grasses – Three (3) gallons each.

**a.** Water shall be applied at a controlled rate and in such a manner to ensure that the water reaches the root zone (saucer) of the plant or plant bed and does not run off to adjacent

088-185

ITEM NO. 0949000A ITEM NO. 0949131A ITEM NO. 0949146A ITEM NO. 0949164A ITEM NO. 0949165A ITEM NO. 0949356A ITEM NO. 0949446A ITEM NO. 0949834A ITEM NO. 0949852A

- areas. Watering shall be applied in a manner that does not dislodge plants, erode soil or mulch, or cause damage to saucer.
- **b.** The Contractor may use slow-release, drip irrigation bags for watering in accordance with manufacturer's instructions. The use of these portable/temporary irrigation bags will require the approval of the Landscape Architect. Overhead hydro-seeder spray nozzles shall not be used as watering devices.
- 11. Pruning: As directed by the Landscape Architect, plants shall be pruned at the project site before or immediately after planting in accordance with the best horticultural practice. No leader shall be cut unless directed by the Landscape Architect. Broken, or badly bruised branches, sucker growth, etc., shall be removed with clean cuts.
- **12. Spraying:** Spraying with antidesiccant shall be at the Contractor's discretion and as approved by the Landscape Architect at no additional cost to the City of New Britain.
- **13. Mulching:** Following the plant material installations wood chip mulch shall be hand placed and spread to a depth of 3 inches and raked to an even surface over all saucer areas for individual trees and shrubs and over the entire area of shrub beds and elsewhere as directed.
- **14. Repair:** Repair of existing grass areas damaged by the Contractor in the progress of his work shall be the responsibility of the Contractor, who shall restore the disturbed areas to their original condition at no additional expense to the City of New Britain.
- **15. Establishment Period:** All plant material shall be subject to a One-Year Establishment Period. During this time, the Contractor shall use currently accepted horticultural practices to keep all plant material installed in a healthy, vigorous growing condition at the date of final acceptance. The date of final acceptance shall be one full calendar year following the satisfactory completion of the planting activities as confirmed by the Landscape Architect.

An inspection will be held one year from the date of installation with the Contractor, Engineer, and Landscape Architect to determine the acceptability of the plant establishment. An inventory of losses and rejected materials will be made and corrective and necessary clean up measures will be determined at the plant inspection.

#### 9.49.04—Method of Measurement:

088-185

ITEM NO. 0949000A ITEM NO. 0949131A ITEM NO. 0949146A ITEM NO. 0949165A ITEM NO. 0949356A ITEM NO. 0949446A ITEM NO. 0949834A ITEM NO. 0949852A

- 1. Planting: The quantity for which payment will be made will be the number of each size and kind of plants counted in place, planted and accepted.
- 2. **Mulching:** This work will be measured for payment by the number of cubic yards surface measurement of the specified thickness for the area on which wood chip mulch has been completed and accepted.

#### 9.49.05—Basis of Payment:

- 1. Planting: Payment for this work will be made at the contract unit price each for the kind and size of plant and method of planting, as the case may be, completed and accepted in place, except that when approved, partial payment for work satisfactorily performed in the excavation of plant pits and for furnishing and placing planting soil and peat humus admixture may be made in amounts not to exceed 20% of the unit bid price for the respective plant.
- 2. Mulching: This work will be paid for at the contract unit price per cubic yard for wood chip mulch complete in place.
- **3.** The unit prices shall include all materials, equipment, tools, labor, transportation, operations and all work incidental thereto, including the removal of guy wires, hose and tree support stakes after the initial establishment period.

Pay Item	Pay Unit
Wood Chip Mulch	CY
Syringa Reticulata, "Ivory Silk" Japanese Tree Lilac 3"-3.5" CAL. B.B.	EA
Quercus Rubra, Northern Red Oak, 3" – 3.5" CAL. B.B.	EA
Malus "Red Jewel", Spring Snow Crabapple 3" – 3.5" CAL. B.B.	EA
Carya Ovata, Shagbark Hickory, 3" – 3.5" CAL. B.B.	EA
Prunus Serrulata Kwanzan Cherry 3" – 3.5" CAL. B.B.	EA
Buxus Sempervirens, "American Boxwood" Classic, 3 Gallon Container	EA
Acer Rubrum Red Maple 3"-3.5" CAL. B.B.	EA
Acer Saccharinum Silver Maple 3" – 3.5" CAL. B.B.	EA

088-185	ITEM NO. 0949000A ITEM NO. 0949131A
	ITEM NO. 0949146A
	ITEM NO. 0949164A ITEM NO. 0949165A
	ITEM NO. 0949356A
	ITEM NO. 0949446A
	ITEM NO. 0949834A ITEM NO. 0949852A

# ITEM #0950005A- TURF ESTABLISHMENT

# 9.50.02—Materials: Delete and replace with the following

Unless otherwise specified by the Engineer, the seed mixture shall conform to the following:

<u>Variety</u>	Proportion by Weight Percent	Min. Purity <a href="Percent">Percent</a>	Min. Germination Percent
A 34 Kentucky	25	90	30
Georgetown Kentucky	25	90	30
Touchdown Kentucky	25	90	30
Palmer Perennial Ryegrass	8.33	90	90
Pennfine Perennial Ryegrass	8.33	90	90
Fiesta Perennial Ryegrass	8.33	90	90

Other improved seed varieties of similar type may be substituted upon approval of the Superintendant of Parks for the City of New Britain. All seed shall be subject to the testing provisions of the Association of Official Seed Analysts.

088-185 ITEM NO. 0950005A

#### ITEM #0952001A - SELECTIVE CLEARING AND THINNING

This work shall conform to the requirements of Section 9.52, amended as follows:

#### **Article 9.52.03—Construction Methods**

Delete the second sentence in the first paragraph "Trees, stumps and brush to be removed shall be cut flush with the ground surface." And replace with the following:

Trees, stumps and brush to be removed shall be removed to limits determined by the Engineer and backfilled with material similar to the adjacent area.

Add the following:

The Contractor shall trim all existing street trees to remain within the project limits and on the side street approaches as directed by the Engineer or shown on the plans.

The Contractor shall trim and/or remove vegetation necessary to obtain required intersection sightlines and proper visibility to signage or as directed by the Engineer.

The Engineer will inspect the identified trees and verify the limits of clearing and thinning prior to the Contractor proceeding with his cutting operation.

# **Article 9.52.05—Basis of Payment**

Add the following:

This item shall also include appropriate backfill material, tools, equipment and labor.

# ITEM #0969062A - CONSTRUCTION FIELD OFFICE, MEDIUM

**Description:** Under the item included in the bid document, adequate weatherproof office quarters with related furnishings, materials, equipment and other services, shall be provided by the Contractor for the duration of the work, and if necessary, for a close-out period determined by the Engineer. The office, furnishings, materials, equipment, and services are for the exclusive use of City forces and others who may be engaged to augment City forces with relation to the Contract. The office quarters shall be located convenient to the work site and installed in accordance with Article 1.08.02. This office shall be separated from any office occupied by the Contractor. Ownership and liability of the office quarters shall remain with the Contractor.

**Furnishings/Materials/Supplies/Equipment:** All furnishings, materials, equipment and supplies shall be in like new condition for the purpose intended and require approval of the Engineer.

**Office Requirements**: The Contractor shall furnish the office quarters and equipment as described below:

Description \ Office Size	Small	Med.	Large	Extra
				Large
Minimum Sq. Ft. of floor space with a minimum ceiling height of 7 ft.	400	400	1000	2000
Minimum number of exterior entrances.	2	2	2	2
Minimum number of parking spaces.	7	7	10	15

Office Layout: The office shall have a minimum square footage as indicated in the table above, and shall be partitioned as shown on the building floor plan as provided by the Engineer.

<u>Tie-downs and Skirting:</u> Modular offices shall be tied-down and fully skirted to ground level.

<u>Lavatory Facilities:</u> For field offices sizes Small and Medium the Contractor shall furnish a toilet facility at a location convenient to the field office for use by City personnel and such assistants as they may engage; and for field offices sizes Large and Extra Large the Contractor shall furnish two (2) separate lavatories with toilet (men and women), in separately enclosed rooms that are properly ventilated and comply with applicable sanitary codes. Each lavatory shall have hot and cold running water and flush-type toilets. For all facilities the Contractor shall supply lavatory and sanitary supplies as required.

Windows and Entrances: The windows shall be of a type that will open and close conveniently, shall be sufficient in number and size to provide adequate light and ventilation, and shall be fitted with locking devices, blinds and screens. The entrances shall be secure, screened, and fitted with a lock for which four keys shall be furnished. All keys to the construction field office shall be furnished to the Department and will be kept in their possession while State personnel are using the office. Any access to the entrance ways shall meet applicable building codes, with appropriate handrails. Stairways shall be ADA/ABA compliant and have non-skid tread surfaces. An

ADA/ABA compliant ramp with non-skid surface shall be provided with the Extra-Large field office.

<u>Lighting</u>: The Contractor shall equip the office interior with electric lighting that provides a minimum illumination level of 100 foot-candles at desk level height, and electric outlets for each desk and drafting table. The Contractor shall also provide exterior lighting that provides a minimum illumination level of 2 foot-candles throughout the parking area and for a minimum distance of 10 ft. on each side of the field office.

<u>Parking Facility:</u> The Contractor shall provide a parking area, adjacent to the field office, of sufficient size to accommodate the number of vehicles indicated in the table above. If a paved parking area is not readily available, the Contractor shall construct a parking area and driveway consisting of a minimum of 6 inches of processed aggregate base graded to drain. The base material will be extended to the office entrance.

<u>Field Office Security:</u> Physical Barrier Devices - This shall consist of physical means to prevent entry, such as: 1) All windows shall be barred or security screens installed; 2) All field office doors shall be equipped with dead bolt locks and regular day operated door locks; and 3) Other devices as directed by the Engineer to suit existing conditions.

<u>Electric Service</u>: The field office shall be equipped with an electric service panel to serve the electrical requirements of the field office, including: lighting, general outlets, computer outlets, calculators etc., and meet the following minimum specifications:

- A. 120/240 volt, 1 phase, 3 wire
- B. Ampacity necessary to serve all equipment. Service shall be a minimum 100 amp dedicated to the construction field office.
- C. The electrical panel shall include a main circuit breaker and branch circuit breakers of the size and quantity required.
- D. Additional 120 volt, single phase, 20 amp, isolated ground dedicated power circuit with dual NEMA 5-20 receptacles will be installed at each computer workstation location.
- E. Additional 120 volt, single phase, 20 amp, isolated ground dedicated power circuit with dual NEMA 5-20 receptacles will be installed, for use by the Telephone Company.
- F. Additional 120-volt circuits and duplex outlets as required meeting National Electric Code requirements.
- G. One exterior (outside) wall mounted GFI receptacle, duplex, isolated ground, 120 volt, straight blade.
- H. After work is complete and prior to energizing, the City's electrical inspector, must be contacted.
- I. Prior to field office removal, the City's Information Systems Office must be notified to deactivate the communications equipment.

Heating, Ventilation and Air Conditioning (HVAC): The field office shall be equipped with sufficient heating, air conditioning and ventilation equipment to maintain a temperature range of 68°-80° Fahrenheit within the field office.

<u>Telephone Service</u>: The Contractor shall provide telephone service with unlimited nation-wide calling plan. For a Small, Medium and Large field office this shall consist of the installation of two (2) telephone lines: one (1) line for phone/voice service and one (1) line dedicated for the facsimile machine. For an Extra-Large field office this shall consist of four (4) telephone lines: three (3) lines for phone/voice service and one (1) line dedicated for facsimile machine. The Contractor shall pay all charges.

<u>Data Communications Facility Wiring:</u> Contractor shall install a Category 6 568B patch panel in a central wiring location and Cat 6 cable from the patch panel to each PC station, Smart Board location, Multifunction Laser Printer/Copier/Scanner/Fax, terminating in a (Category 6 568B) wall or surface mount data jack. The central wiring location shall also house either the data circuit with appropriate power requirements or a category 5 cable run to the location of the installed data circuit.

For Small, Medium and Large field offices the Contractor shall run a CAT 6 LAN cable a minimum length of 25 feet for each computer to LAN switch area leaving an additional 10 feet of cable length on each side with terminated RJ45 connectors. For an Extra-Large field office the Contractor shall run CAT 6 LAN cables from workstations, install patch panel in data circuit demark area and terminate runs with RJ45 jacks at each computer location. Terminate runs to patch panel in LAN switch area. Each run / jack shall be clearly labeled with an identifying Jack Number.

The Contractor shall supply cables to connect the Wi-Fi printer to the Contractor supplied internet router and to workstations as needed. These cables shall be separate from the LAN cables and data Jacks detailed above for the Department network.

<u>Additional Equipment, Facilities and Services:</u> The Contractor shall provide at the field Office at least the following to the satisfaction of the Engineer:

	Office Size			
Furnishing Description	Small	Med.	Large	Extra
T drinishing Description				Large
	Quantity			ı
Office desk (2.5 ft x 5 ft) with drawers, locks, and	_	_	_	_
matching desk chair that have pneumatic seat height	1	3	5	8
adjustment and dual wheel casters on the base.				
Standard secretarial type desk and matching desk chair that				1
has pneumatic seat height adjustment and dual wheel	-	-	-	1
casters on the base.	2	3	5	8
Personal computer tables (4 ft x 2.5 ft).		3	3	8
Drafting type tables (3 ft x 6 ft) and supported by wall brackets and legs; and matching drafters stool that have				
pneumatic seat height adjustment, seat back and dual	1	1	1	2
wheel casters on the base.				
Conference table, 3 ft x 12 ft.	_	_	_	1
Table – 3 ft x 6 ft.	_	_	_	1
Office Chairs.	2	4	8	20
Mail slot bin – legal size.	-	_	1	1
Non-fire resistant cabinet.	_	_	2	4
Fire resistant cabinet (legal size/4 drawer), locking.	1	1	2	3
Storage racks to hold 3 ft x 5 ft display charts.	-	_	1	2
Vertical plan racks for 2 sets of 2 ft x 3 ft plans for each	1	1	_	
rack.	1	1	2	2
Double door supply cabinet with 4 shelves and a lock – 6 ft			1	2
x 4 ft.	-	_	1	2
Case of cardboard banker boxes (Min 10 boxes/case)	1	1	2	3
Open bookcase – 3 shelves – 3 ft long.	-	-	2	2
White Dry-Erase Board, 36" x 48"min. with markers and	1	1	1	1
eraser.	1	1	1	1
Interior partitions – 6 ft x 6 ft, soundproof type, portable	_	_	6	6
and freestanding.	_		U	U
Coat rack with 20 coat capacity.	-	-	-	1
Wastebaskets - 30 gal., including plastic waste bags.	1	1	1	2
Wastebaskets - 5 gal., including plastic waste bags.	1	3	6	10
Electric wall clock.	-	-	-	2
Telephone.	1	1	1	-
Full size stapler 20 (sheet capacity, with staples)	1	2	5	8
Desktop tape dispensers (with Tape)	1	2	5	8
Rain Gauge	1	1	1	1

Flip Phones as specified under Computer Hardware and				
Software.	-	_	-	-
Smart Phones as specified under Computer Hardware and				
Software.	-	_	_	-

The furnishings and equipment required herein shall remain the property of the Contractor. Any supplies required to maintain or operate the above listed equipment or furnishings shall be provided by the Contractor for the duration of the project.

Computer Hardware and Software: Field Office Wi-Fi Connection, Wi-Fi Printer, Digital Camera(s), Flip Phones, Smart Phones, Multifunction Laser Printer/Copier/Scanner/Fax, Video Projectors, and Smart Board(s) as well as associated hardware and software, must meet the requirements of this specification as well as the latest minimum specifications posted, as of the project advertising date, at CTDOT's web site <a href="http://www.ct.gov/dot/cwp/view.asp?a=1410&q=563904">http://www.ct.gov/dot/cwp/view.asp?a=1410&q=563904</a>

Within 10 calendar days after the signing of the Contract but before ordering/purchasing the Wi-Fi Printer (separate from the Multifunction Laser Printer/Copier/Scanner/Fax), Field Office Wi-Fi, Digital Camera(s), Flip Phones, Smart Phones, Multifunction Laser Printer/Copier/Scanner/Fax, Video Projector(s) and Smart Board(s) as well as associated hardware, the Contractor must submit a copy of their proposed order(s) with catalog cuts and specifications to the Engineer for review and approval. The Wi-Fi Printer, Wi-Fi Router, Flip Phones, Smart Phones, digital cameras, Projector(s) and Smart Board(s) will be reviewed by the Engineer. The Multifunction Laser Printer/Copier/Scanner/Fax will be reviewed by the Engineer. The Contractor shall not purchase the hardware, software, or services until the Engineer informs them that the proposed equipment, software, and services are approved. The Contractor will be solely responsible for the costs of any hardware, software, or services purchased without approval.

The Contractor and/or their internet service provider shall be responsible for the installation and setup of the field office Wi-Fi, Wi-Fi printer, and the configuration of the wireless router as directed by the Engineer.

The Contractor shall provide all supplies, paper, maintenance, service and repairs (including labor and parts) for the Wi-Fi printers, copiers, field office Wi-Fi, fax machines and other equipment and facilities required by this specification for the duration of the Contract. All repairs must be performed with-in 48 hours. If the repairs require more than a 48 hours then an equal or better replacement must be provided.

Once the Contract has been completed, the hardware and software will remain the property of the Contractor.

<u>First Aid Kit:</u> The Contractor shall supply a first aid kit adequate for the number of personnel expected based on the size of the field office specified and shall keep the first aid kit stocked for the duration that the field office is in service.

Rain Gauge: The Contractor shall supply install and maintain a rain gauge for the duration of the project, meeting these minimum requirements. The rain gauge shall be installed on the top of a post such that the opening of the rain gauge is above the top of the post an adequate distance to avoid splashing of rain water from the top of the post into the rain gauge. The Location of the rain gauge and post shall be approved by the Engineer. The rain gauge shall be made of a durable material and have graduations of 0.1 inches or less with a minimum total column height of 5 inches. If the rain gauge is damaged the Contractor shall replace it prior to the next forecasted storm event at no additional cost.

<u>Concrete Testing Equipment:</u> If the Contract includes items that require compressive strength cylinders for concrete, in accordance with the Schedule of Minimum Testing Requirements for Sampling Materials for Test, the Contractor shall provide the following equipment.

- A) Concrete Cylinder Curing Box meeting the requirements of Section 6.12 of the Standard Specifications.
- B) Air Meter The air meter provided shall be in good working order and meet the requirements of AASHTO T 152.
- C) Slump Cone Mold Slump cone, base plate, and tamping rod shall be provided in like-new condition and meet the requirements of AASHTO T119, Standard Test Method for Slump of Hydraulic-Cement Concrete.

All testing equipment will remain the property of the Contractor at the completion of the project.

Insurance Policy: The Contractor shall provide a separate insurance policy, with no deductible, in the minimum amount of five thousand dollars (\$5,000) in order to insure all City-owned data equipment and supplies used in the office against all losses. The Contractor shall be named insured on that policy, and the City shall be an additional named insured on the policy. These losses shall include, but not be limited to: theft, fire, and physical damage. The City will be responsible for all maintenance costs of City owned computer hardware. In the event of loss, the Contractor shall provide replacement equipment in accordance with current CTDOT equipment specifications, within seven days of notice of the loss. If the Contractor is unable to provide the required replacement equipment within seven days, the City may provide replacement equipment and deduct the cost of the equipment from monies due or which may become due the Contractor under the Contract or under any other contract. The Contractor's financial liability under this paragraph shall be limited to the amount of the insurance coverage required by this paragraph. If the cost of equipment replacement required by this paragraph should exceed the required amount of the insurance coverage, the City will reimburse the Contractor for replacement costs exceeding the amount of the required coverage.

088-185

Maintenance: During the occupancy by the City, the Contractor shall maintain all facilities and furnishings provided under the above requirements, and shall maintain and keep the office quarters clean through the use of weekly professional cleaning to include, but not limited to, washing & waxing floors, cleaning restrooms, removal of trash, etc. Exterior areas shall be mowed and clean of debris. A trash receptacle (dumpster) with weekly pickup (trash removal) shall be provided. Snow removal, sanding and salting of all parking, walkway, and entrance ways areas shall be accomplished during a storm if on a workday during work hours, immediately after a storm and prior to the start of a workday. If snow removal, salting and sanding are not completed by the specified time, the State will provide the service and all costs incurred will be deducted from the next payment estimate.

**Method of Measurement:** The furnishing and maintenance of the construction field office will be measured for payment by the number of calendar months that the office is in place and in operation, rounded up to the nearest month.

There will not be any price adjustment due to any change in the minimum computer hardware and software requirements.

**Basis of Payment:** The furnishing and maintenance of the Construction Field Office will be paid for at the Contract unit price per month for "Construction Field Office, (Type)," which price shall include all material, equipment, labor, service contracts, licenses, software, repair or replacement of hardware and software, related supplies, utility services, parking area, external illumination, trash removal, snow and ice removal, and work incidental thereto, as well as any other costs to provide requirements of this specified this specification.

Pay Item Construction Field Office (Medium) Pay Unit Month

# ITEM NO. 0971001A - MAINTENANCE AND PROTECTION OF TRAFFIC

#### **Article 9.71.01 – Description is supplemented by the following:**

The Contractor shall maintain and protect traffic as described by the following and as limited in the Special Provision "Prosecution and Progress":

# **HART STREET**

The Contractor shall maintain and protect existing traffic operations.

Excepted therefrom will be those periods, <u>during the allowable periods</u>, when the Contractor is actively working, at which time the Contractor shall be allowed to maintain and protect at least one lane of traffic in each direction, on a travel path not less than 22 feet in width.

Excepted therefrom will be those periods, <u>during the allowable periods</u>, when the Contractor is actively working, at which time the Contractor shall be allowed to maintain and protect at least an alternating one-way traffic operation, on a travel path not less than 11 feet in width. The length of the alternating one-way operation shall not exceed 300 feet in length and there shall be no more than one alternating one-way operation within the project limits without prior approval from the Engineer.

#### VINE STREET

The Contractor shall maintain and protect existing traffic operations.

Excepted therefrom will be those periods, <u>during the allowable periods</u>, when the Contractor is actively working, at which time the Contractor shall be allowed to maintain and protect at least one lane of traffic in each direction, each lane on a travel path not less than 11 feet in width.

Excepted therefrom will be those periods, <u>during the allowable periods</u>, when the Contractor is actively working, at which time the Contractor shall be allowed to maintain and protect at least an alternating one-way traffic operation, on a travel path not less than 11 feet in width. The length of the alternating one-way operation shall not exceed 300 feet in length and there shall be no more than one alternating one-way operation within the project limits without prior approval from the Engineer.

#### **All Other Roadways**

The Contractor shall maintain and protect existing traffic operations.

Excepted therefrom will be those periods, <u>during the allowable periods</u>, when the Contractor is actively working, at which time the Contractor shall be allowed to maintain and protect at least one lane of traffic in each direction, each lane on a paved travel path not less than 11 feet in width.

Excepted therefrom will be those periods, <u>during the allowable periods</u>, when the Contractor is actively working, at which time the Contractor shall maintain and protect at least an alternating one-way traffic operation, on a paved travel path not less than 11 feet in width. The length of the alternating one-way traffic operation shall not exceed 300 feet and there shall be no more than one alternating one-way traffic operation within the project limits without prior approval of the Engineer.

# **Commercial and Residential Driveways**

The Contractor shall maintain access to and egress from all commercial and residential driveways throughout the project limits. The Contractor will be allowed to close said driveways to perform the required work during those periods when the businesses are closed, unless permission is granted from the business owner to close the driveway during business hours. If a temporary closure of a residential driveway is necessary, the Contractor shall coordinate with the owner to determine the time period of the closure.

#### **Article 9.71.03 - Construction Method is supplemented as follows:**

#### General

Unpaved travel paths will only be permitted for areas requiring full depth and full width reconstruction, in which case, the Contractor will be allowed to maintain traffic on processed aggregate for a duration not to exceed 10 calendar days. The unpaved section shall be the full width of the road and perpendicular to the travel lanes. Opposing traffic lane dividers shall be used as a centerline.

The Contractor is required to delineate any raised structures within the travel lanes, so that the structures are visible day and night, unless there are specific contract plans and provisions to temporarily lower these structures prior to the completion of work.

The Contractor shall schedule operations so that pavement removal and roadway resurfacing shall be completed full width across a roadway section by the end of a workday (work night), or as directed by the Engineer.

When the installation of all intermediate courses of bituminous concrete pavement is completed for the entire roadway, the Contractor shall install the final course of bituminous concrete pavement.

When the Contractor is excavating adjacent to the roadway, the Contractor shall provide a 3-foot shoulder between the work area and travel lanes, with traffic drums spaced a maximum of 25 feet. At the end of the workday, if the vertical drop-off exceeds 3 inches, the Contractor shall provide a temporary traversable slope of 4:1 or flatter that is acceptable to the Engineer.

If applicable, when an existing sign is removed, it shall be either relocated or replaced by a new sign during the same working day.

The Contractor shall not store any material on-site which would present a safety hazard to motorists or pedestrians (e.g. fixed object or obstruct sight lines).

The field installation of a signing pattern shall constitute interference with existing traffic operations and shall not be allowed, except during the allowable periods.

# **Existing Signing**

The Contractor shall maintain all existing signs throughout the project limits during the duration of the project. The Contractor shall temporarily relocate signs and sign supports as many times as deemed necessary, and install temporary sign supports if necessary and as directed by the Engineer.

#### **Requirements for Winter**

The Contractor shall schedule a meeting with representatives from the City including the City Engineer, Project Manager, Project Inspector, and representative(s) from the Hospital of Central Connecticut to determine what interim traffic control measures the Contractor shall accomplish for the winter to provide safety to the motorists and permit adequate snow removal procedures. This meeting shall be held prior to October 31 of each year and will include, but not be limited to, discussion of the status and schedule of the following items: lane and shoulder widths, pavement restoration, traffic signal work, pavement markings, and signing.

#### **Signing Patterns**

The Contractor shall erect and maintain all signing patterns in accordance with the traffic control plans contained herein. Proper distances between advance warning signs and proper taper lengths are mandatory.

#### **Pavement Markings**

The Contractor will be responsible for the furnishing of all pavement markings, either temporary or permanent. The Contractor shall repaint roadways as directed by the Engineer. This work shall be paid for under the appropate pavement marking items.

The Contractor is alearted that all pavement markings must be in place by the end of the work day for any roadway to be opened on that day.

# TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS

The following guidelines shall assist field personnel in determining when and what type of traffic control patterns to use for various situations. These guidelines shall provide for the safe and efficient movement of traffic through work zones and enhance the safety of work forces in the work area.

#### TRAFFIC CONTROL PATTERNS

Traffic control patterns shall be used when a work operation requires that all or part of any vehicle or work area protrudes onto any part of a travel lane or shoulder. For each situation, the installation of traffic control devices shall be based on the following:

Speed and volume of traffic Duration of operation Exposure to hazards

Traffic control patterns shall be uniform, neat and orderly so as to command respect from the motorist.

In the case of a horizontal or vertical sight restriction in advance of the work area, the traffic control pattern shall be extended to provide adequate sight distance for approaching traffic.

If a lane reduction taper is required to shift traffic, the entire length of the taper should be installed on a tangent section of roadway so that the entire taper area can be seen by the motorist.

Any existing signs that are in conflict with the traffic control patterns shall be removed, covered, or turned so that they are not readable by oncoming traffic.

When installing a traffic control pattern, a Buffer Area should be provided and this area shall be free of equipment, workers, materials and parked vehicles.

Typical traffic control plans 19 through 25 may be used for moving operations such as line striping, pot hole patching, mowing, or sweeping when it is necessary for equipment to occupy a travel lane.

Traffic control patterns will not be required when vehicles are on an emergency patrol type activity or when a short duration stop is made and the equipment can be contained within the shoulder. Flashing lights and appropriate trafficperson shall be used when required.

Although each situation must be dealt with individually, conformity with the typical traffic control plans contained herein is required. In a situation not adequately covered by the typical traffic control plans, the Contractor must contact the Engineer for assistance prior to setting up a traffic control pattern.

#### PLACEMENT OF SIGNS

Signs must be placed in such a position to allow motorists the opportunity to reduce their speed prior to the work area. Signs shall be installed on the same side of the roadway as the work area. On multi-lane divided highways, advance warning signs shall be installed on both sides of the highway. On directional roadways (on-ramps, off-ramps, one-way roads), where the sight distance to signs is restricted, these signs should be installed on both sides of the roadway.

# ALLOWABLE ADJUSTMENT OF SIGNS AND DEVICES SHOWN ON THE TRAFFIC CONTROL PLANS

The traffic control plans contained herein show the location and spacing of signs and devices under ideal conditions. Signs and devices should be installed as shown on these plans whenever possible.

The proper application of the traffic control plans and installation of traffic control devices depends on actual field conditions.

Adjustments to the traffic control plans shall be made only at the direction of the Engineer to improve the visibility of the signs and devices and to better control traffic operations. Adjustments to the traffic control plans shall be based on safety of work forces and motorists, abutting property requirements, driveways, side roads, and the vertical and horizontal curvature of the roadway.

The Engineer may require that the traffic control pattern be located significantly in advance of the work area to provide better sight line to the signing and safer traffic operations through the work zone.

Table I indicates the minimum taper length required for a lane closure based on the posted speed limit of the roadway. These taper lengths shall only be used when the recommended taper lengths shown on the traffic control plans cannot be achieved.

TABLE I – MINIMUM TAPER LENGTHS

POSTED SPEED LIMIT	MINIMUM TAPER LENGTH IN FEET FOR
MILES PER HOUR	A SINGLE LANE CLOSURE
30 OR LESS	180
35	250
40	320
45	540
50	600
55	660
65	780

#### **SECTION 1. WORK ZONE SAFETY MEETINGS**

- 1.a) Prior to the commencement of work, a work zone safety meeting will be conducted with representatives of City Engineering Department, City of New Britain Police, the Contractor (Project Superintendent) and the Traffic Control Subcontractor (if different than the prime Contractor) to review the traffic operations, lines of responsibility, and operating guidelines which will be used on the project. Other work zone safety meetings during the course of the project should be scheduled as needed.
- 1.b) A Work Zone Safety Meeting Agenda shall be developed and used at the meeting to outline the anticipated traffic control issues during the construction of this project. Any issues that can't be resolved at these meetings will be brought to the attention of the District Engineer and the Office of Construction. The agenda should include:
  - Review Project scope of work and time
  - Review Section 1.08, Prosecution and Progress
  - Review Section 9.70, Trafficpersons
  - Review Section 9.71, Maintenance and Protection of Traffic
  - Review Contractor's schedule and method of operations.
  - Review areas of special concern: ramps, turning roadways, medians, lane drops, etc.
  - Open discussion of work zone questions and issues
  - Discussion of review and approval process for changes in contract requirements as they relate to work zone areas

#### **SECTION 2. GENERAL**

- 2.a) If the required minimum number of signs and equipment (i.e. one High Mounted Internally Illuminated Flashing Arrow for each lane closed, two TMAs, Changeable Message Sign, etc.) are not available; the traffic control pattern shall not be installed.
- 2.b) The Contractor shall have back-up equipment (TMAs, High Mounted Internally Illuminated Flashing Arrow, Changeable Message Sign, construction signs, cones/drums, etc.) available at all times in case of mechanical failures, etc. The only exception to this is in the case of sudden equipment breakdowns in which the pattern may be installed but the Contractor must provide replacement equipment within 24 hours.

- 2.c) Failure of the Contractor to have the required minimum number of signs, personnel and equipment, which results in the pattern not being installed, shall not be a reason for a time extension or claim for loss time.
- 2.d) In cases of legitimate differences of opinion between the Contractor and the Inspection staff, the Inspection staff shall err on the side of safety. The matter shall be brought to the City Engineer for resolution immediately or, in the case of work after regular business hours, on the next business day.

#### SECTION 3. INSTALLING AND REMOVING TRAFFIC CONTROL PATTERNS

- 3.a) Lane Closures shall be installed beginning with the advance warning signs and proceeding forward toward the work area.
- 3.b) Lane Closures shall be removed in the reverse order, beginning at the work area, or end of the traffic control pattern, and proceeding back toward the advance warning signs.
- 3.c) Stopping traffic may be allowed:
  - As per the contract for such activities as blasting, steel erection, etc.
  - During paving, milling operations, etc. where, in the middle of the operation, it is necessary to flip the pattern to complete the operation on the other half of the roadway and traffic should not travel across the longitudinal joint or difference in roadway elevation.
  - To move slow moving equipment across live traffic lanes into the work area.
- 3.d) Under certain situations when the safety of the traveling public and/or that of the workers may be compromised due to conditions such as traffic volume, speed, roadside obstructions, or sight line deficiencies, as determined by the Engineer and/or State Police, traffic may be briefly impeded while installing and/or removing the advance warning signs and the first ten traffic cones/drums only. Appropriate measures shall be taken to safely slow traffic. If required, traffic slowing techniques may be used and shall include the use of Truck Mounted Impact Attenuators (TMAs) as appropriate, for a minimum of one mile in advance of the pattern starting point. Once the advance warning signs and the first ten traffic cones/drums are installed/removed, the TMAs and sign crew shall continue to install/remove the pattern as described in Section 5 and traffic shall be allowed to resume their normal travel.
- 3.e) The Contractor must adhere to using the proper signs, placing the signs correctly, and ensuring the proper spacing of signs.
- 3.f) Additional devices are required on entrance ramps, exit ramps, and intersecting roads to warn and/or move traffic into the proper travelpath prior to merging/exiting with/from the

- main line traffic. This shall be completed before installing the mainline pattern past the ramp or intersecting roadway.
- 3.g) Prior to installing a pattern, any conflicting existing signs shall be covered with an opaque material. Once the pattern is removed, the existing signs shall be uncovered.
- 3.h) On limited access roadways, workers are prohibited from crossing the travel lanes to install and remove signs or other devices on the opposite side of the roadway. Any signs or devices on the opposite side of the roadway shall be installed and removed separately.

# SECTION 4. USE OF HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

- 4.a) On limited access roadways, one Flashing Arrow shall be used for each lane that is closed. The Flashing Arrow shall be installed concurrently with the installation of the traffic control pattern and its placement shall be as shown on the traffic control plan. For multiple lane closures, one Flashing Arrow is required for each lane closed. If conditions warrant, additional Flashing Arrows should be employed (i.e.: curves, major ramps, etc.).
- 4.b) On non-limited access roadways, the use of a Flashing Arrow for lane closures is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to use the Flashing Arrow.
- 4.c) The Flashing Arrow shall not be used on two lane, two-way roadways for temporary alternating one-way traffic operations.
- 4.d) The Flashing Arrow board display shall be in the "arrow" mode for lane closure tapers and in the "caution" mode (four corners) for shoulder work, blocking the shoulder, or roadside work near the shoulder. The Flashing Arrow shall be in the "caution" mode when it is positioned in the closed lane.
- 4.e) The Flashing Arrow shall not be used on a multi-lane roadway to laterally shift all lanes of traffic, because unnecessary lane changing may result.

# SECTION 5. USE OF TRUCK MOUNTED IMPACT ATTENUATOR VEHICLES (TMAs)

5.a) For lane closures on limited access roadways, a minimum of two TMAs shall be used to install and remove traffic control patterns. If two TMAs are not available, the pattern shall not be installed.

- 5.b) On non-limited access roadways, the use of TMAs to install and remove patterns closing a lane(s) is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to utilize the TMAs.
- 5.c) Generally, to establish the advance and transition signing, one TMA shall be placed on the shoulder and the second TMA shall be approximately 1,000 feet ahead blocking the lane. The flashing arrow board mounted on the TMA should be in the "flashing arrow" mode when taking the lane. The sign truck and workers should be immediately ahead of the second TMA. In no case shall the TMA be used as the sign truck or a work truck. Once the transition is in place, the TMAs shall travel in the closed lane until all Changeable Message Signs, signs, Flashing Arrows, and cones/drums are installed. The flashing arrow board mounted on the TMA should be in the "caution" mode when traveling in the closed lane.
- 5.d) A TMA shall be placed prior to the first work area in the pattern. If there are multiple work areas within the same pattern, then additional TMAs shall be positioned at each additional work area as needed. The flashing arrow board mounted on the TMA should be in the "caution" mode when in the closed lane.
- 5.e) TMAs shall be positioned a sufficient distance prior to the workers or equipment being protected to allow for appropriate vehicle roll-ahead in the event that the TMA is hit, but not so far that an errant vehicle could travel around the TMA and into the work area. For additional placement and use details, refer to the specification entitled "Type 'D' Portable Impact Attenuation System". Some operations, such as paving and concrete repairs, do not allow for placement of the TMA(s) within the specified distances. In these situations, the TMA(s) should be placed at the beginning of the work area and shall be advanced as the paving or concrete operations proceed.
- 5.f) TMAs should be paid in accordance with how the unit is utilized. When it is used as a TMA and is in the proper location as specified, and then it should be paid at the specified hourly rate for "Type 'D' Portable Impact Attenuation System". When the TMA is used as a Flashing Arrow, it should be paid at the daily rate for "High Mounted Internally Illuminated Flashing Arrow". If a TMA is used to install and remove a pattern and then is used as a Flashing Arrow, the unit should be paid as a "Type 'D' Portable Impact Attenuation System" for the hours used to install and remove the pattern, typically 2 hours (1 hour to install and 1 hour to remove), and is also paid for the day as a "High Mounted Internally Illuminated Flashing Arrow".

#### SECTION 6. USE OF TRAFFIC DRUMS AND TRAFFIC CONES

6.a) Traffic drums shall be used for taper channelization on limited-access roadways, ramps, and turning roadways and to delineate raised catch basins and other hazards.

- 6.b) Traffic drums shall be used in place of traffic cones in traffic control patterns that are in effect for more than a 36-hour duration.
- 6.c) Traffic Cones less than 42 inches in height shall not be used on limited-access roadways or on non-limited access roadways with a posted speed limit of 45 mph and above.
- 6.d) Typical spacing of traffic drums and/or cones shown on the Traffic Control Plans in the Contract are maximum spacings and may be reduced to meet actual field conditions as required.

# SECTION 7. USE OF (REMOTE CONTROLLED) CHANGEABLE MESSAGE SIGNS (CMS)

- 7.a) For lane closures on limited access roadways, one CMS shall be used in advance of the traffic control pattern. Prior to installing the pattern, the CMS shall be installed and in operation, displaying the appropriate lane closure information (i.e.: Left Lane Closed Merge Right). The CMS shall be positioned ½ 1 mile ahead of the lane closure taper. If the nearest Exit ramp is greater than the specified ½ 1 mile distance, than an additional CMS shall be positioned a sufficient distance ahead of the Exit ramp to alert motorists to the work and therefore offer them an opportunity to take the exit.
- 7.b) CMS should not be installed within 1000 feet of an existing CMS.
- 7.c) On non-limited access roadways, the use of CMS for lane closures is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to use the CMS.
- 7.d) The advance CMS is typically placed off the right shoulder, 5 feet from the edge of pavement. In areas where the CMS cannot be placed beyond the edge of pavement, it may be placed on the paved shoulder with a minimum of five (5) traffic drums placed in a taper in front of it to delineate its position. The advance CMS shall be adequately protected if it is used for a continuous duration of 36 hours or more.
- 7.e) When the CMS are no longer required, they should be removed from the clear zone and have the display screen cleared and turned 90° away from the roadway.
- 7.f) The CMS generally should not be used for generic messages (ex: Road Work Ahead, Bump Ahead, Gravel Road, etc.).
- 7.g) The CMS should be used for specific situations that need to command the motorist's attention which cannot be conveyed with standard construction signs (Examples include: Exit 34 Closed Sat/Sun Use Exit 35, All Lanes Closed Use Shoulder, Workers on Road Slow Down).

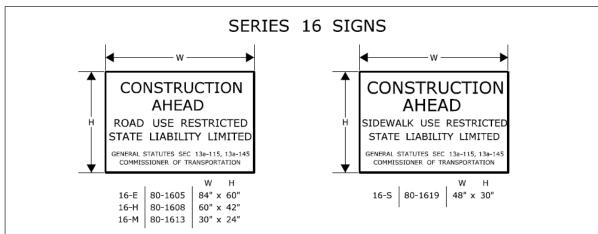
- 7.h) Messages that need to be displayed for long periods of time, such as during stage construction, should be displayed with construction signs. For special signs, please coordinate with the Engineerir for the proper layout/dimensions required.
- 7.i) The messages that are allowed on the CMS are as follows:

Message No.	Frame 1	Frame 2	Message No.	Frame 1	Frame 2
1	LEFT LANE CLOSED	MERGE RIGHT	9	LANES CLOSED AHEAD	REDUCE SPEED
2	2 LEFT LANES CLOSED	MERGE RIGHT	10	LANES CLOSED AHEAD	USE CAUTION
3	LEFT LANE CLOSED	REDUCE SPEED	11	WORKERS ON ROAD	REDUCE SPEED
4	2 LEFT LANES CLOSED	REDUCE SPEED	12	WORKERS ON ROAD	SLOW DOWN
5	RIGHT LANE CLOSED	MERGE LEFT	13	EXIT XX CLOSED	USE EXIT YY
6	2 RIGHT LANES CLOSED	MERGE LEFT	14	EXIT XX CLOSED USE YY	FOLLOW DETOUR
7	RIGHT LANE CLOSED	REDUCE SPEED	15	2 LANES SHIFT AHEAD	USE CAUTION
8	2 RIGHT LANES CLOSED	REDUCE SPEED	16	3 LANES SHIFT AHEAD	USE CAUTION

For any other message(s), approval must be received from the Engineer prior to their use. No more than two (2) displays shall be used within any message cycle.

#### SECTION 8. USE OF STATE POLICE OFFICERS

- 8.a) State Police may be utilized only on limited access highways and secondary roadways under their primary jurisdiction. One Officer may be used per critical sign pattern. Shoulder closures and right lane closures can generally be implemented without the presence of a State Police Officer. Likewise in areas with moderate traffic and wide, unobstructed medians, left lane closures can be implemented without State Police presence. Under some situations it may be desirable to have State Police presence, when one is available. Examples of this include: nighttime lane closures; left lane closures with minimal width for setting up advance signs and staging; lane and shoulder closures on turning roadways/ramps or mainline where sight distance is minimal; and closures where extensive turning movements or traffic congestion regularly occur, however they are not required.
- 8.b) Once the pattern is in place, the State Police Officer should be positioned in a non-hazardous location in advance of the pattern. If traffic backs up beyond the beginning of the pattern, then the State Police Officer shall be repositioned prior to the backup to give warning to the oncoming motorists. The State Police Officer and TMA should not be in proximity to each other.
- 8.c) Other functions of the State Police Officer(s) may include:
  - Assisting entering/exiting construction vehicles within the work area.
  - Enforcement of speed and other motor vehicle laws within the work area, if specifically requested by the project.
- 8.d) State Police Officers assigned to a work site are to only take direction from the Engineer.



THE 16-S SIGN SHALL BE USED ON ALL PROJECTS THAT REQUIRE SIDEWALK RECONSTRUCTION OR RESTRICT PEDESTRIAN TRAVEL ON AN EXISTING SIDEWALK.

SERIES 16 SIGNS SHALL BE INSTALLED IN ADVANCE OF THE TRAFFIC CONTROL PATTERNS TO ALLOW MOTORISTS THE OPPORTUNITY TO AVOID A WORK ZONE. SERIES 16 SIGNS SHALL BE INSTALLED ON ANY MAJOR INTERSECTING ROADWAYS THAT APPROACH THE WORK ZONE. ON LIMITED-ACCESS HIGHWAYS, THESE SIGNS SHALL BE LOCATED IN ADVANCE OF THE NEAREST UPSTREAM EXIT RAMP AND ON ANY ENTRANCE RAMPS PRIOR TO OR WITHIN THE WORK ZONE LIMITS.

THE LOCATION OF SERIES 16 SIGNS CAN BE FOUND ELSEWHERE IN THE PLANS OR INSTALLED AS DIRECTED BY THE ENGINEER.

SIGNS 16-E AND 16-H SHALL BE POST-MOUNTED.

SIGN 16-E SHALL BE USED ON ALL EXPRESSWAYS.

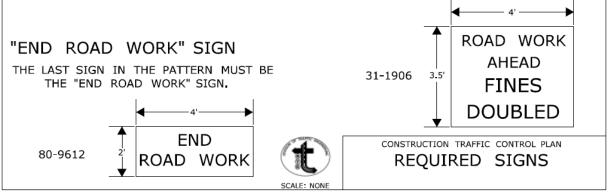
SIGN 16-H SHALL BE USED ON ALL RAMPS, OTHER STATE ROADWAYS, AND MAJOR TOWN/CITY ROADWAYS.

SIGN 16-M SHALL BE USED ON OTHER TOWN ROADWAYS.

# REGULATORY SIGN "ROAD WORK AHEAD, FINES DOUBLED"

THE REGULATORY SIGN "ROAD WORK AHEAD FINES DOUBLED" SHALL BE INSTALLED FOR ALL WORK ZONES THAT OCCUR ON ANY STATE HIGHWAY IN CONNECTICUT WHERE THERE ARE WORKERS ON THE HIGHWAY OR WHEN THERE IS OTHER THAN EXISTING TRAFFIC OPERATIONS.

THE "ROAD WORK AHEAD FINES DOUBLED" REGULATORY SIGN SHALL BE PLACED AFTER THE SERIES 16 SIGN AND IN ADVANCE OF THE "ROAD WORK AHEAD" SIGN.



CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED Charles S. Harlow 2012.06.05 11:35:43-04'00'

PRINCIPAL ENGINEER

#### NOTES FOR TRAFFIC CONTROL PLANS

- 1. IF A TRAFFIC STOPPAGE OCCURS IN ADVANCE OF SIGN (A), THEN AN ADDITIONAL SIGN (A) SHALL BE INSTALLED IN ADVANCE OF THE STOPPAGE.
- 2. SIGNS (A), (A), AND (D) SHOULD BE OMITTED WHEN THESE SIGNS HAVE ALREADY BEEN INSTALLED TO DESIGNATE A LARGER WORK ZONE THAN THE WORK ZONE THAT IS ENCOMPASSED ON THIS PLAN.
- 3. SEE TABLE 1 FOR ADJUSTMENT OF TAPERS IF NECESSARY.
- 4. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN TRAFFIC DRUMS SHALL BE USED IN PLACE OF TRAFFIC CONES.
- 5. ANY LEGAL SPEED LIMIT SIGNS WITHIN THE LIMITS OF A ROADWAY / LANE CLOSURE AREA SHALL BE COVERED WITH AN OPAQUE MATERIAL WHILE THE CLOSURE IS IN EFFECT, AND UNCOVERED WHEN THE ROADWAY / LANE CLOSURE IS RE-OPENED TO ALL LANES OF TRAFFIC.
- 6. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN ANY EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE ERADICATED OR COVERED, AND TEMPORARY PAVEMENT MARKINGS THAT DELINEATE THE PROPER TRAVELPATHS SHALL BE INSTALLED.
- DISTANCES BETWEEN SIGNS IN THE ADVANCE WARNING AREA MAY BE REDUCED TO 100' ON LOW-SPEED URBAN ROADS (SPEED LIMIT < 40 MPH).</li>
- 8. IF THIS PLAN IS TO REMAIN IN OPERATION DURING THE HOURS OF DARKNESS, INSTALL BARRICADE WARNING LIGHTS HIGH INTENSITY ON ALL POST-MOUNTED DIAMOND SIGNS IN THE ADVANCE WARNING AREA.
- 9. A CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE HALF TO ONE MILE IN ADVANCE OF THE LANE CLOSURE TAPER.
- 10 SIGN P SHALL BE MOUNTED A MINIMUM OF 7 FEET FROM THE PAVEMENT SURFACE TO THE BOTTOM OF THE SIGN.

TABLE 1 - MINIMUM TAPER LENGTHS

POSTED SPEED LIMIT	MINIMUM TAPER LENGTH FOR
(MILES PER HOUR)	A SINGLE LANE CLOSURE
30 OR LESS	180' (55m)
35	250' (75m)
40	320' (100m)
45	540' <b>(1</b> 65m)
50	600' <b>(1</b> 80m)
55	660' <b>(</b> 200m <b>)</b>
65	780' (240m)

#### METRIC CONVERSION CHART (1" = 25mm)

ENGLISH	METRIC	ENGLISH	H METRIC	ENGLISH	METRIC
12"	300mm	42"	1050mm	72"	1800mm
18"	450mm	48"	1200mm	78"	1950mm
24"	600mm	54"	1350mm	84"	2100mm
30"	750mm	60"	1500mm	90"	2250mm
36"	900mm	66"	1650mm	96"	2400mm

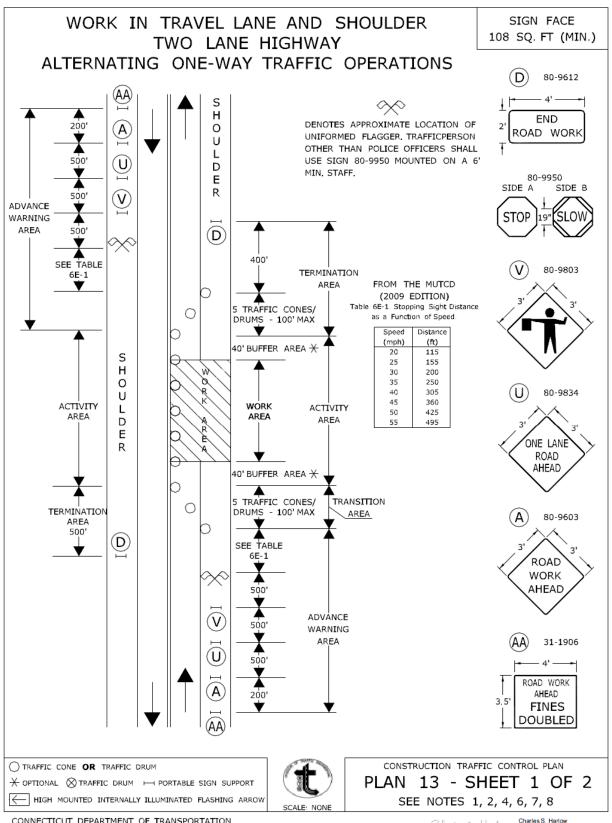


CONSTRUCTION TRAFFIC CONTROL PLAN

CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED Chilly

Charles S. Harlow 2012.06.05 15:50:35-04'00' PRINCIPAL ENGINEER



CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED Chains S. U. Charles S. Harlow 2012.06.05 15:55:23-04'00'

# WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE 108 SQ. FT (MIN.)

#### HAND SIGNAL METHODS TO BE USED BY UNIFORMED FLAGGERS

THE FOLLOWING METHODS FROM SECTION 6E.07, FLAGGER PROCEDURES, IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," SHALL BE USED BY UNIFORMED FLAGGERS WHEN DIRECTING TRAFFIC THROUGH A WORK AREA. THE STOP/SLOW SIGN PADDLE (SIGN NO. 80-9950) SHOWN ON THE TRAFFIC STANDARD SHEET TR-1220 01 ENTITLED, "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" SHALL BE USED.

#### A. TO STOP TRAFFIC

TO STOP ROAD USERS, THE FLAGGER SHALL FACE ROAD USERS AND AIM THE STOP PADDLE FACE TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FREE ARM SHALL BE HELD WITH THE PALM OF THE HAND ABOVE SHOULDER LEVEL TOWARD APPROACHING TRAFFIC.



#### B TO DIRECT TRAFFIC TO PROCEED

TO DIRECT STOPPED ROAD USERS TO PROCEED, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FLAGGER SHALL MOTION WITH THE FREE HAND FOR ROAD USERS TO PROCEED.



#### C. TO ALERT OR SLOW TRAFFIC

TO ALERT OR SLOW TRAFFIC, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. TO FURTHER ALERT OR SLOW TRAFFIC, THE FLAGGER HOLDING THE SLOW PADDLE FACE TOWARD ROAD USERS MAY MOTION UP AND DOWN WITH THE FREE HAND, PALM DOWN.



TRAFFIC CONE OR TRAFFIC DRUM

★ OPTIONAL ⊗ TRAFFIC DRUM → PORTABLE SIGN SUPPORT

HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



CONSTRUCTION TRAFFIC CONTROL PLAN

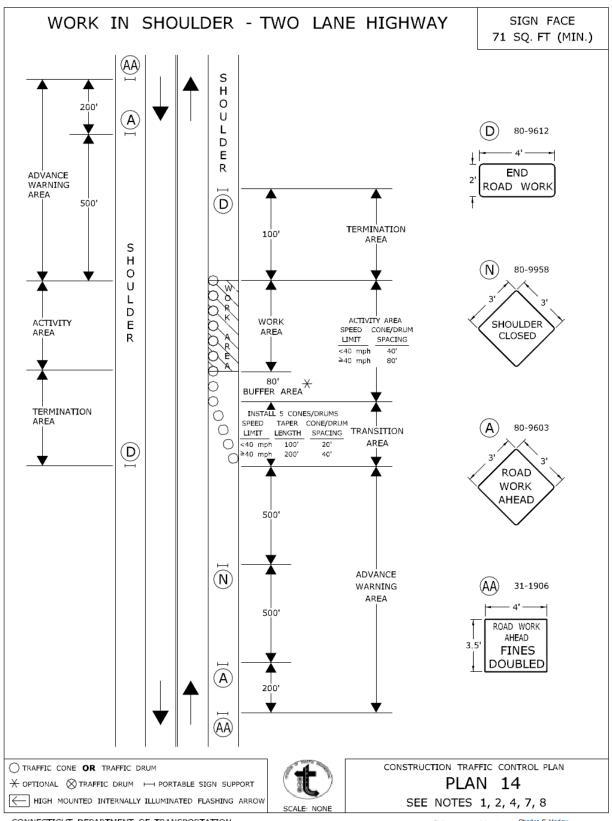
PLAN 13 - SHEET 2 OF 2

SEE NOTES 1, 2, 4, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING & CONSTRUCTION

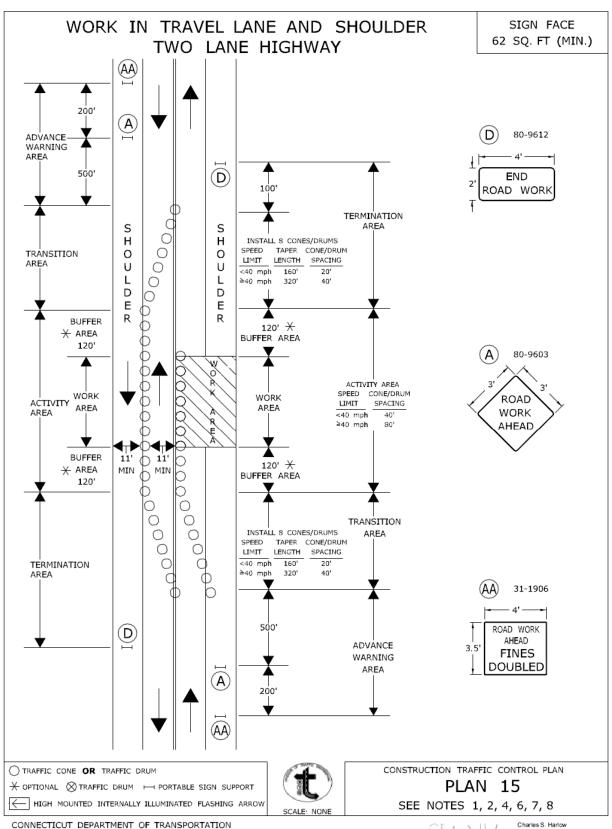
APPROVED

Charles S. Harlow 2012.06.05 15:55:45-04'00' PRINCIPAL ENGINEER



CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING & CONSTRUCTION

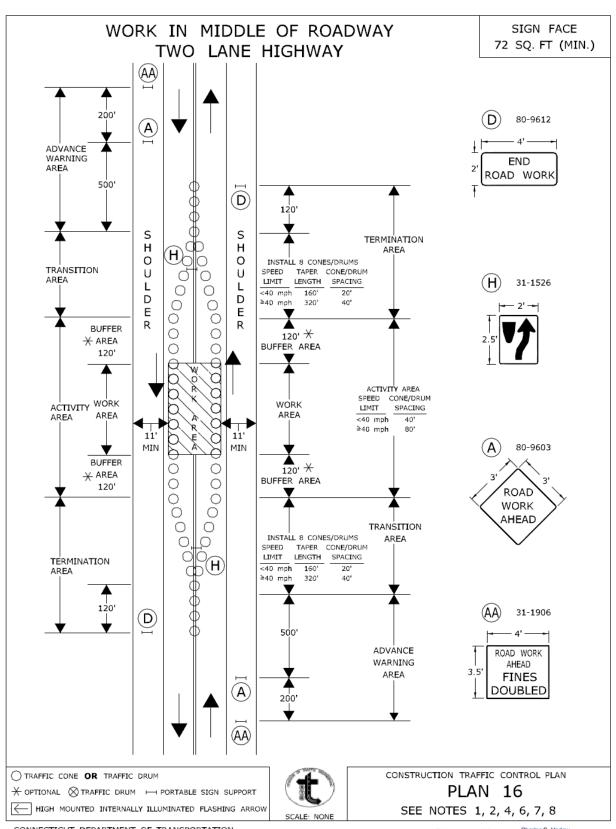
APPROVED Challes 8. 11.4— Charles S. Harlow 2012.06.05 15.56:09-04:00'



BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED Charles S. Harlow 2012.06.05 15:56:29-04'00'

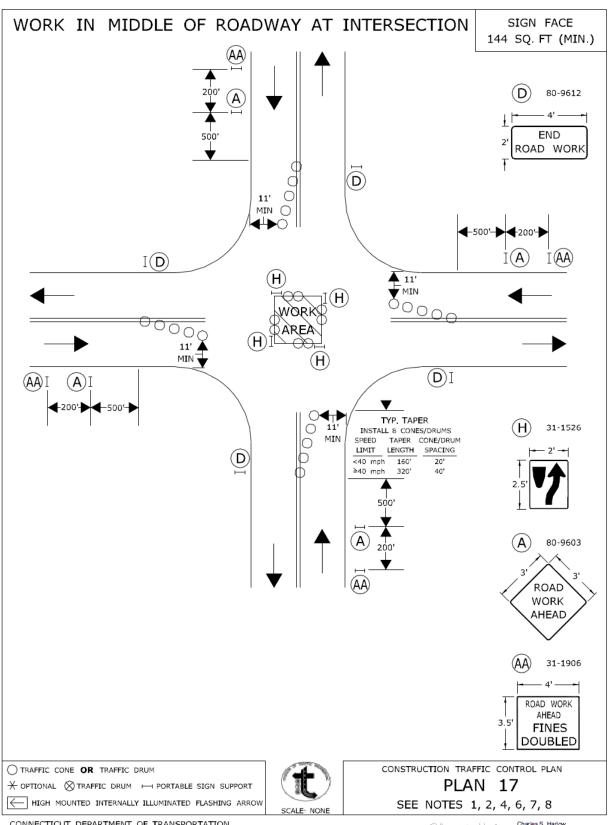
PRINCIPAL ENGINEER



CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED

Chains S. L. Charles S. Harlow
2012:06:05:15:56:51-04'00'
PRINCIPAL ENGINEER



CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED

Chairs S. L. Charles S. Harlow
2012:06:05:15:57:16-04'00'

PRINCIPAL ENGINEER

# Article 9.71.05 – Basis of Payment is supplemented by the following:

The temporary relocation of signs and supports, and the furnishing, installation and removal of any temporary supports shall be paid for under the item "Maintenance and Protection of Traffic".

The cost of furnishing, installing, and removing the material for the 4H:1V traversable slope shall be paid for under the item "Maintenance and Protection of Traffic."

Rev. 01/28/2016

#### ITEM #0974001A – REMOVAL OF EXISTING MASONRY

Work under this item shall conform to the requirements of Section 9.74, supplemented and amended as follows:

## **9.74.01—Description:** Add the following:

This item shall include the removal of existing concrete retaining wall located along the East side Vine Street, to the limits as shown on the plans or directed by the Engineer.

## **9.74.03—Construction Methods:** Add the following:

The Contractor shall cut the concrete at the demolition limit to minimize disturbance to the section to remain in place. The proposed method and equipment proposed by the Contractor shall be submitted to the Engineer for review.

When removing concrete adjacent to roadways, sidewalks or private property, the Contractor shall take all necessary measures to prevent material from entering the adjacent facility.

All debris shall be disposed of by the Contractor in accordance with all applicable State and Federal regulations.

#### 9.74.05—Basis of Payment: Add the following:

No additional payment will be made for full or partial depth saw cutting required for the removal of existing concrete. The cost of this work shall be included in the unit price per cubic yard for "Removal of Existing Masonry".

Pay Item	<u>Pay Unit</u>
Removal of Existing Masonry	CY

088-185 ITEM #0974001A

# ITEM #0981101A - OPPOSING TRAFFIC LANE DIVIDER

#### **Article 9.81.01 - Description:**

This item shall include furnishing, installing, resetting, and removing Opposing Traffic Lane Dividers. Opposing Traffic Lane Dividers will be used to separate opposing traffic on a two-lane two-way roadway. The legend on the divider shall be two opposing arrows.

The Opposing Traffic Lane Divider shall meet the requirements of Federal Highway Administration's Strategic Highway Research Program (SHRP). The Opposing Traffic Lane Divider shall be 12 inch wide by 18 inch high sign panels mounted back to back on a flexible support post. The post shall be mounted to a base.

A series of these devices shall be placed on the center line of a temporary two-way operation. The support shall be designed to recover automatically to a vertical position if struck by a vehicle.

The opposing Traffic Lane Divider is covered in Section 6F.76 of the Manual on Uniform Traffic Control Devices (2009 Edition).

#### **Article 9.81.02 - Materials:**

- Panel The vertical panel shall be constructed of a flexible material resistant to ultraviolet light, ozone and hydrocarbons. The surface shall be smooth and suitable for adherence of appropriate retroreflective sheeting. The retroreflective sheeting shall be Type IV retroreflective sheeting in accordance with Section M.18.09.
- 2) Support Post The support post shall be made of a material resistant to ultraviolet light, ozone, and hydrocarbons. The post shall have sufficient stiffness to remain rigid in windy conditions. The support shall be designed to recover automatically to a vertical position or manually restored (when fastened to the roadbed), if struck by a vehicle.
- Base The base shall consist of a metal ballast plate fastened to a rubber base. For long-term use, the metal ballast plate can be fastened directly to the roadbed. When fastened to the roadbed, the post will need to be manually reset when hit. The base shall meet the requirements of the Federal Highway Administration's Strategic Highway Research Program (SHRP).

#### **Article 9.81.03 - Construction Methods:**

The Opposing Traffic Lane Dividers shall be spaced every 30 feet apart or as directed by the Engineer. The Contractor shall insure that the devices are kept clean and bright. Any devices that are missing, damaged, or defaced so that they are not effective, as determined by the Engineer and in accordance with the American Traffic Safety Services Association (ATSSA) guidelines contained in "Quality Standards for Work Zone Traffic Control Devices", shall be replaced by the Contractor at no cost to the State. When no longer required, they shall remain the property of the Contractor.

#### **Article 9.81.04 - Method of Measurement:**

This work will be measured for payment by the number of opposing traffic lane dividers furnished, installed and accepted on the project. Replacement devices shall not be measured for payment. Devices relocated to a different location in accordance with the Engineer shall not be measured.

### **Article 9.81.05 - Basis of Payment:**

This work will be paid for at the contract unit price each for "Opposing Traffic Lane Divider" which price shall include all materials, equipment, tools, labor and work incidental to furnishing, installing, maintaining and removing the units.

Pay ItemPay UnitOpposing Traffic Lane DividerEA

# ITEM #1206023A - REMOVAL AND RELOCATION OF EXISTING SIGNS

Section 12.06 is supplemented as follows:

# **Article 12.06.01 – Description is supplemented with the following:**

Work under this item shall consist of the removal and/or relocation of designated side-mounted extruded aluminum signs, sheet aluminum signs, sign posts, sign supports, and foundations where indicated on the plans or as directed by the City of New Britain. Work under this item shall also include furnishing and installing new sign posts and associated hardware for signs designated for relocation.

#### **Article 12.06.03 – Construction Methods is supplemented with the following:**

Prior to the start of construction, the Contractor shall temporarily relocate all Hospital way finding signage from Corbin Avenue and Hart Street to Monroe Street. Exact locations will be determined in the field by the Engineer. These temporarily relocated signs shall be removed once the permanent Hospital signage is installed on Hart Street and construction activities will no longer interfere with normal traffic operations.

The Contractor shall take care during the removal and relocation of existing signs, sign posts, and sign supports that are to be relocated so that they are not damaged. Any material that is damaged shall be replaced by the Contractor at no cost to the City.

Sheet aluminum signs, sign posts and hardware designated for removal are to be salvaged if they are in suitable condition as determined by the Engineer. The Contractor shall sort all salvaged sheet aluminum signs by size and shall stack ten signs to a bundle. Each bundle shall be bound by tape or metal strap and the bundles shall be stacked on pallets. The Contractor shall confirm intended delivery of the salvaged sheet aluminum signs, posts and hardware at least seven days in advance and shall deliver the signs to the following address:

Department of Public Works - City Yard 55 Harvard St.
New Britain, CT 06051

Signs, posts and hardware designated for removal and are determined not suitable for salvage shall be removed and disposed of by the Contractor as directed by the Engineer and in accordance with existing standards for removal of signing.

Sheet aluminum signs designated for relocation are to be re-installed on new sign posts.

#### **Article 12.06.04 – Method of Measurement is supplemented with the following:**

Payment under Removal and Relocation of Existing Signs shall be at the contract lump sum price which shall include all extruded aluminum signs, sheet aluminum signs, sign posts, and hardware designated for relocation, all new sign posts and associated hardware for signs designated for relocation, all extruded aluminum signs, sheet aluminum signs, sign posts and sign hardware

088-185 ITEM #1206023A

designated for scrap, and foundations and other materials designated for removal and disposal, and all work and equipment required.

#### **Article 12.06.05 – Basis of Payment is supplemented with the following:**

This work will be paid for at the contract lump sum price for "Removal and Relocation of Existing Signs" which price shall include relocating designated extruded aluminum signs, sheet aluminum signs, sign posts and hardware, providing new posts and associated hardware for relocated signs, removing and disposing of foundations and other materials, and all equipment, material, tools and labor incidental thereto. This price shall also include removing, loading, transporting, and unloading of extruded aluminum signs, sheet aluminum signs, sign posts, and hardware designated for salvage or scrap and all equipment, material, tools and labor incidental thereto.

Pay Item	Pay Unit
Removal and Relocation of Existing Signs	L.S.

088-185 ITEM #1206023A

# <u>ITEM #1208932A – SIGN FACE SHEET ALUMINUM (TYPE IV RETROREFLECTIVE SHEETING)</u>

Work under this item shall conform to the requirements of Section 12.08, amended as follows:

# **12.08.03-Construction Methods:** Add the following:

The Contractor shall submit shop drawings for approval for all City of New Britain specific signs. City specific signs are noted on the plans by "NB-XXXX".

088-185 ITEM #1208932A

#### ITEM #1302054A- REPLACE CURB BOX

**Description**: The Contractor shall replace curb stop valve boxes and covers appurtenant to individual water services which are in a damaged condition prior to construction as determined by the Engineer. The Contractor shall bring to the attention of the Engineer any curb stop valve boxes which are found to be damaged prior to their replacement. Curb stop valve boxes which are damaged by the contractor shall be replaced by the contractor at no cost to the City. If necessary, the contractor shall furnish and install a new top section of the curb stop valve box so as to protect and make accessible the curb stop valve contained therein. If the bottom section is damaged, this shall be replaced as well.

**Materials**: The Contractor shall furnish a Bingham & Taylor buffalo style cast iron curb box type 94E and cover or approved equal. All backfill material required shall be furnished and placed by the Contractor and shall conform to Article M.02.01 of Form 816.

Construction Methods: Contractor shall carefully excavate around the curb stop valve box to expose, remove and install the new curb stop valve box. The new curb stop valve box shall be installed and adjusted to final grade and the excavation backfilled and compacted in one foot lifts to insure no settlement. The Curb stop valve cover must be exposed and accessible. After completion, the cover shall be removed, and a curb stop key lowered to insure it mates with the curb stop valve to facilitate shut off & turn on.

**Method of Measurement**: This work will be measured for payment at the unit price per each curb stop valve box and cover that is installed and approved.

**Basis of Payment**: This work shall be paid for at the contract unit price for "Replace Curb Box" complete in place, which price shall include the cost of furnishing all material, labor, equipment, clearing, trenching, disposal of excavated materials, furnishing and placing backfill material and grading necessary to complete the work.

Pay Item	Pay Unit
Replace Curb Box	EA

# <u>ITEM #1303195A – REMOVE HYDRANT (WATER MAIN)</u> <u>ITEM #1303204A – HYDRANT ASSEMBLY (WATER MAIN)</u>

#### **13.00.01 – Description:**

#### NOTE:

In This Special Provision, the "Owner" is the New Britain Water Department.

Work under this item shall consist of the furnishing, installing, disinfecting, and testing of all cement lined ductile iron water pipe, including fittings, bends, air valves, and blow-offs, hydrants, joint restraints, including concrete thrust blocks, connecting sleeves, and other appurtenances, as indicated on the plans, with no substitutions, or as directed by the Engineer. Abandonment of existing water mains, including disconnecting and reconnecting new and existing water main, and water services, removal of existing water main and appurtenances, and cutting, filling the main with grout, and plugging mains and services to be abandoned in place, shall also be included as part of this item. Work under the appropriate items shall also include the relining of the existing water main as called for on the contract drawings and as specified herein.

In addition to all materials, the contractor shall furnish all labor, equipment, excavation, sheeting and trench boxes, backfilling, including flowable fill and polyethylene wrap as required and ordered by the engineer, dewatering and utility support necessary to complete the installation of the new water main and water services and as required to abandon existing facilities where necessary to complete the installation.

Work under this item shall also consist of providing new fire hydrant assemblies where shown on the plans or where directed by the Engineer. Work shall also include, but not be limited to, the removal and salvage of existing fire hydrants with hydrant branch, valve and valve box, where indicated on the plans, and delivered to the Water Department.

Work shall include, but not be limited to, trench excavation and backfill, furnishing and installing the hydrant lead complete with hydrant, anchoring tee, thrust block, pipe, fittings, mechanical joint retainer glands, coverall pipe joint restrainers, and hydrant with concrete thrust block units and drainage stone.

Work shall also include providing temporary water service, if required or directed by the Engineer. A plan for any temporary services shall be approved by the New Britain Water Department prior to the start of construction.

Manufacturer's data sheets and certification of compliance with specifications for all pipes, valves, fittings, and appurtenances shall be submitted to the Engineer for approval.

Manufacturer's data sheets for hydrants, pipe, gate valves, fittings, coveralls and retainer glands shall also be submitted to the Engineer for approval.

88-185

Where "Form 816" is used, it shall mean the "State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges, and Incidental Construction, form 816, 2004" with latest revisions.

13.00.02 – Materials: Unless otherwise specified by the Engineer, the pipe, fittings, valves and appurtenances to be utilized in this work shall be new and unused, shall be of the types and materials specified herein, and shall meet the requirements specified herein. All material found during the progress of the work to have cracks, flaws or other defects will be rejected by the Engineer. All defective materials shall be promptly removed from the work site and replaced at no additional expense to the City of New Britain or ConnDOT.

1. <u>Ductile Iron Pipe, Fittings and Joints</u> shall meet the requirements of the latest revisions of AWWA C151 (ANSI A21.51). Joints shall be rubber gasket push-on type manufactured in accordance with the latest revision of AWWA C111 (ANSI A21.11). Pipe shall be supplied with the standard exterior bituminous coating of either coal tar or asphalt base approximately one mil thick. The interior shall be cement lined in accordance with the latest revision of AWWA C104 (ANSI A21.4), and pipe shall be of thickness Class 52 unless otherwise indicated. Any cut pipe that does not socket, due to the outside diameter of the pipe barrel exceeding the tolerances stated in the American Standard Specifications shall be replaced with new pipe. All ductile iron pipes shall be rated for a minimum working pressure of 125 psi (862 kPa) and a test pressure of 200 psi (1,380 kPa).

All pipe and fittings shall have cast on it or stamped with the maker's name or mark, the letters "DI", and the casting date. The length and weight of pipe, thickness class and running number shall be painted on each pipe.

All fittings shall be mechanical joint only. All pipe joints shall be either mechanical or push-on types, which employ a single elongated grooved rubber gasket to effect a watertight joint seal except for 6-in (150-mm) pipe which shall have mechanical joints only. Rubber gaskets shall be furnished with the pipe and shall be considered included in the price per meter of pipe.

Fittings including tees, bends, reducers, caps and plugs, and mechanical joint plugs, shall be ductile iron meeting the requirements of AWWA C110 (ANSI A21.10) with mechanical joints in conformance with AWWAC111 (ANSI A21.11). Fittings shall be rated for a minimum working pressure of 125 psi (862 kPa) and a test pressure of 200 psi (1,380 kPa). Pipe and fittings shall have an inside lining of cement-mortar in accordance with AWWA C104 (ANSI A21.4). All pipe and fittings shall be coated inside and outside with an approved bituminous material. Compact firings meeting the requirements of AWWA C153 (ANSI A21.53) of latest revision may be used. Exterior coating shall be standard bituminous coating of either coal tar or asphalt base approximately 0.001 in (0.025 mm) thick.

Connecting sleeves or step couplings for connecting new water mains to existing mains shall have mechanical joint ends restrained using retainer glands and shall be solid sleeve

88-185

Model F-1014 as manufactured by the Clow Corporation, Oak Brook, Illinois, U.S. Pipe, Birmingham, Alabama, or approved equal.

Coverall pipe joint restrainers shall be the Series 1700 restrainer as manufactured by Ebba Iron, Inc., Eastland, Texas or approved equal.

Mechanical joint retainer glands shall be "Megalug" as manufactured by Ebba Iron, Eastland, Texas, or approved equal.

Tiebolts, tic-bolt nuts, rod couplings, threaded and rod nuts, retainer clamps, and round flat washers for restrained joints shall be steel, meeting the requirements of ASTM A 36-77a.

Concrete thrust blocks shall be provided where indicated on the plans. Concrete for thrust blocks and pipe cradles, shall be Class "A" concrete and conform to the requirements of CONN DOT From 816 Section M.03. Mortar shall conform to the requirements of CONN DOT Form 816 Section M.11.04.

Testing of Ductile Iron pipe and Fittings and Final Acceptance of Ductile Iron pipe and fittings shall be as per the standards and guidelines set forth in the City of New Britain's Standard Specifications for Municipal Construction Section 4.01-2E.

#### 2. Gate Valve, Butterfly Valve Assembly and Boxes

All gate valves shall be mechanical joint type and shall meet the requirements of AWWA C509 and AWAAA C504 of latest revision. Valves shall open to the right, (clockwise), shall have non-rising stems, O-ring seals, square operating nuts with bolts, glands and rubber gaskets. Valves shall be rated for a minimum working pressure of 175 psi (1210 kPa) and a test pressure of 300 psi (2,068 kPa). Gate and Butterfly valves shall be manufactured by Mueller Company or approved equal.

Valve boxes shall consist of a base and adjustable slide type top section with cover. The cover shall be the drop type with the word "WATER" cast on the top of the pipe. Valve boxes shall be manufactured by Bingham and Taylor, or approved equal.

#### 3. Water Services

Water service piping shall be copper tubing and shall conform to ASTM B88, type "k" Annealed (soft) AWWA Specification 7SOCR or Federal Specification WWT-799. Tubing shall be continuous and shall be supplied and installed as needed with a diameter to match existing service diameter as determined in the field or as directed by the Engineer. Corporation stops and couplings shall be as manufactured by Mueller Co., or approved equal. For a 1-in (25-mm) service, use a 0.75-in (19-mm) stop with a 1 x 0.75 (25 x 19) coupling. For a 2-in (50-mm) service, use a 1.5-in (35.5- mm) stop with a 1.5 x 2 (35.5 x 50) coupling.

#### 4. Trench Excavation

The trench shall be backfilled with approved material or as indicated on the plans.

Where called for on the plans, or as required by the presiding utility authority, all utility crossings shall be supported as necessary. Class "A" concrete supports shall be poured for pipe supports as required or directed by the engineer. Flowable fill and polyethylene wrap shall be used in all locations where utilities cross the existing water main or as determined by the New Britain Water Department. Flowable fill and polyethylene wrap shall be submitted to the NB Water Department for approval.

Utility Identification Tape shall be 4-in (100-mm) wide, designed to withstand underground exposure, colored blue and be durably imprinted with an appropriate warning indicating the presence of the buried pipe.

#### **Excavation Support System:**

Sheeting and shoring will be used to protect existing utilities and to protect trenches from excavation cave-ins. The excavation support system shall comply with the requirements as defined by the US Department of Labor OSHA regulations and any other regulation being State, Federal or local agency having jurisdiction including the CT Building Code requirements. If trench boxes are used for excavation support, the box shall be certified by the manufacturer or contractor's engineer before starting work.

Sheeting and boxing for trench excavation shall conform to the requirements of ConnDOT Form 816 Section 7.14.02.

The contractor shall provide dust control measures as necessary to reduce dust as a result of construction activity. Dust control procedures and products shall be approved by the engineer.

Gravel shall conform to Section M.02.02 of the ConnDOT Form 816 Standard Specifications.

## 5. <u>Sterilization Corporations</u>

Sterilization corporation stops, including gate valves and boxes, pipe, and restraints shall be installed at locations as directed by the Water Department.

#### 6. Air Valves

AirValves shall be installed at all high points on the water main unless otherwise approved by the engineer. Air Valves shall be Wedge Air Vents as manufactured by Wedge Manufacturing or approved equal. Valve boxes for air valves shall be as manufactured by BIBBY STE-STCroix or approved equal.

#### 7. Hydrants

Fire Hydrants shall be Mueller Super Centurion A-425, 5-1/4-inch (131.25-mm) valve opening with pumper, no exceptions, and more specifically as follows:

They shall be breakaway types with safety flange and safety stem coupling design. Breaking point to be below flange. Hydrants will be two way, 5.5 ft (1.7 m) depth of trench, 6-in (150 mm) mechanical joint bell connection with lugs, rubber gasket, gland, cast iron bolts and nuts, outlets nozzle caps and chains. 4.5 in (113-mm) and 5.33-in (135-mm) valve opening with mechanical joint shoe to fit pit cast and centrifugal cast pipe, synthetic rubber ring type main valve open left with two 2.5-in (63-mm) hose nozzles with national standard threads, 1.5-in (38-mm) pentagon operating nut, dry top bonnet, pressure seal, factory filled sealed lubricant, self lubricating with a Teflon coated anti-friction wash. Operating nut shall show direction of opening. Hydrant will have four large drain openings which are flushed during opening. And closing of hydrant. Drain openings will be brushed with bronze or other type of corrosion-resistant material. There shall be no toggles, springs, linkages or synchronized mechanism of any kind. Hydrant shall have compression type main valve, closes with pressure. waterway shall be bronze. The waterway is defined to include a bronze upper valve plate, a bronze seat ring; and bronze elbow bush and a bronze subseat. Year and date shall be cast on the hydrant. Hydrants shall have no less than 150 psi (1034 kPa) working pressure and no more than 200 psi (1,380 kPa) test pressure AWWA standard. Hydrants shall be painted red and silver, and shall come with a weathercap over operating nut. They shall be capable of having extension installed at ground line and not at the elbow.

Hydrants, valves and fittings shall be of the type specified or shown on the Contract Drawings. All materials shall be approved by the New Britain City Water Department. All work shall be subject to the approval of the New Britain City Water Department.

Concrete shall be Class "A" Concrete.

Interior and exterior coatings shall meet the requirements of the latest revision of AWWA C502, and the color for that portion of the hydrant above the ground line shall be as directed by the City of New Britain Water Department. In addition, that portion of each hydrant below finished grade shall be given a coating of hot bitumastic material, equal to that used for exterior coating of pipe and fittings prior to installation, or protective coating of epoxy type.

A drain outlet is required. Hydrants shall be installed as shown of the plans and shall be approved by the City Water Department.

Ductile iron push-on joint pipe shall meet the requirements of the latest revision of AWWA C151 (ANSI A21.51) and shall be of Thickness Class 52. Pipe coatings shall meet the requirements specified in the pertinent section of these Special Provisions.

Mechanical joint fittings, exterior and interior coatings, and valve boxes shall meet the requirements specified in the pertinent section of these Special Provisions.

All gate valves shall be resilient seal gate valves and shall meet the requirements specified in the pertinent section of these Special provisions.

Concrete, if used, shall meet the requirements of Article M.03.01 of Form 816 for Class "A."

Crushed stone shall meet the gradation requirements specified in Article M.01.01, No. 6 0.75-in (19mm) designation of Form 816.

Mechanical joint retainer glands and coverall pipe joint retainers shall meet the requirements specified in the pertinent section of these Special Provisions.

Sleeves for connecting new hydrant tees to existing water main shall have mechanical joint ends restrained using retainer glands and shall be solid sleeve.

Gravel shall conform to the requirements of Form 816, Subarticle M.02.02.

#### 8. Tapping Sleeves and Tapping Gate Valves with gate boxes

Valve and valve boxes shall conform to the requirements of the item for water main valves and fittings, open right, non-rising stems with "O" ring seals and 2-inch square operating nuts, mechanical joint on valve outlet 300 psi test pressure and 175 working pressure.

Tapping sleeves shall consist of two sections of heavy welded carbon steel ASTM A285 Grade C which bolt together on the pipe and seal against a Grade 60 Concave Wedge Gasket around the tap opening. The gasket shall be compounded to resist oil, natural gas, salts, acids, alkalis, hydrocarbon fluid, water and other chemicals and withstand temperatures to 212 degrees-F. The outlet half shall have a flat faced flange (AWWA C207 Class D, ANSI 150 lb. drilling) that is recessed to mate with standard tapping valves per MSS-SP60. The outlet shall have a ¾-inch NPT Test Plug. Bolts and nuts shall be corrosion resistant high strength low alloy steel with heavy semi-finished hexagon nuts to AWWA C111 (ANSI A21.11) standards. Finish shall be fusion bonded epoxy, coated to an average of 12 mil thickness. Tapping sleeves shall be JCM 412 Tapping Sleeves (JCM Industries) or Rockwell 622 (Rockwell International) or approved equal.

#### 9. Water main Relining

A. The Contractor shall clean and cement mortar line the existing 14-in (350-mm) water main where shown on the contract drawings.

Cement mortar lining materials shall meet the requirements of AWWA C602.

#### CEMENT MORTAR MIXTURE

- A. The cement mortar mixture shall meet the requirements of AWWA C602 but shall be one part Type I Portland Cement to one part sand by volume.
- B. The mixture shall be composed of cement, sand, and water only.
- C. Mortar shall not be retempered by the mixing in of additional water.
- D. Mortar shall be used before its initial set.
- E. No mortar exhibiting clumping shall be used.
- F. Slump tests on the mortar shall be performed by the Contractor in the presence of the New Britain Water Department when requested by the New Britain Water Department. The New Britain Water Department will request slump tests periodically and anticipates that no more than forty tests will be required. Test shall be performed in accordance with ASTM C143.

#### 13.00.03 - Construction Methods:

## 1. <u>Trench Excavation</u>

All underground utilities shall be located and verified prior to the start of work.

The contractor shall provide all necessary pumps, well points, and drains necessary for removing water from the trenches and shall provide adequate boxing and shoring conforming to latest OSHAA regulations.

Trench excavation and backfill shall be performed in such a manner so as to prevent damage to the pipe and to other utilities. Backfill around the pipe or from 6-in (150 mm) below the pipe to one half the diameter of the pipe shall be with materials as indicated on the plans. All other backfill material shall be placed in 12-in (300 mm) lifts and compacted to 95% maximum density based on ASTM D1557 Method C, or as directed by the Engineer. Backfill material used above the 12-in (300 mm) above the top of the pipe shall be approved by the Engineer. Each layer of material shall be compacted by the use of vibratory compaction equipment or rollers. At such points as cannot be reached by mobile equipment, the materials shall be thoroughly compacted by the use of suitable power driven tampers.

All trenches shall be filled by the end of the workday. Steel plates shall be used only as permitted by the engineer.

Gravel shall replace unsuitable material in the trench from the top of the pipe to 6-in (150-mm) below the bottom of the proposed pipe, and to 12-in (300 mm) from the edge of the proposed pipe on either side of the pipe.

Process Stone shall be furnished to the trench limits as ordered by the engineer.

All materials and procedures used for dust control shall be approved by the engineer. Dust control shall be performed with suitable equipment as approved by the engineer

The contractor shall provide excavation support and utility crossing support as required. All utilities shall be supported in accord with the presiding utility requirements. Where called for on the plans, all utility crossing shall maintain adequate crossing clearances as required by the presiding utility requirements. All crossing shall be provided with supports, adequately designed by the contractor's engineer. All utility crossing supports shall be approved by the engineer.

Only where approved by the engineer, and as a minimum, the contractor shall provide flowable fill and concrete encasements at utility crossings for pipe supports.

Polyethylene wrap shall be installed in accordance with ANSI/AWWA C105/A21.5-99 Standards. Flowable fill shall be placed according to the manufacturers recommendations.

#### Rock in Trench Excavation

Rock shall be removed to 6-in (150 mm) from the bottom of the proposed pipe and to 12-in (300 mm) from the edge of the proposed pipe on either side. Gravel shall replace rock material from ½ the diameter of the proposed pipe to 6-in (150 mm) from the bottom of the proposed pipe, and to 12-in (300 mm) from the edge of the proposed pipe on either side of the pipe.

#### 2. Water Main Pipe and Fittings

Ductile iron pipe, fittings and valves shall be installed as detailed and directed, and in full accordance with the latest revision of AWWA C600, manufacture's recommendations, and accepted best practice, with the below listed qualifications and clarifications. The methods employed in performing the work, and all equipment, tools and machinery used in handling material and executing any part of the work shall be the subject to the approval of the Engineer before the work is started and, whenever found unsatisfactory, shall be changed and improved as required by the Engineer. All equipment, tools and machinery used shall be maintained in a satisfactory working condition.

All salvageable materials shall be taken to the New Britain City Water Department Yard.

It shall be the Contractor's responsibility to coordinate his work schedule with that of the City of New Britain's Water Department. No work shall be performed prior to notifying the Water Department at least 48 hours in advance of the start of work. No work shall be performed without a representative of the City staff to oversee the construction of the new pipeline.

At all installations where a connection is to be made by shutting-off gate valves, for gating off sections of a main which are normally open, the contractor shall verify, with

the City of New Britain's Water Department, that the gate valves are property restrained prior to shutting-off. The excavation may be required to be made the day before work is to start. At which time the contractor shall have all materials on hand. The work shall be done as quickly as possible so that normal operation of the system is resumed in minimum amount of time. Any required operating of valves for this work would be performed by personnel of the New Britain Water Department. Ample notice shall be given to the Water Department so that a minimum of two (2) full working days notice may be given to any user whose service will be discontinued for any reason. It may be necessary for the contractor to perform work outside of normal working hours if service interruption is required. The Contractor shall be responsible for coordinating his work with customers and with the Water Department. The Contractor shall be responsible for paying Department employees at their prevailing overtime wage rate, as well as prevailing usage rate for vehicles and other equipment which are utilized.

It may be necessary for the contractor to isolate and remove a portion of an existing water main in order to accommodate a new utility. All work in this regard shall be coordinated with the New Britain City Water Department. Where necessary the contractor shall provide temporary water services, gate valves, concrete thrust blocks, bends with restraints, plugs, air valves, blow-off assemblies, sterilization corporations, as necessary and as ordered by the engineer.

Proper implements, tools and facilities shall be provided and used by the Contractor for the safe and convenient performances of the work. Prior to installation, all pipe and fittings shall be brushed and wiped clean from lumps blisters grease and oils. All pipe and fittings shall be examined for defects immediately before installation to final position. All pipe, fittings and valves shall be lowered into the trench with a suitable device that will not damage protective coatings and lining. Under no circumstances shall water main material be dropped or dumped into the trench. Any damage to pipe or fittings shall be repaired or replaced by the contractor.

Every precaution shall be taken to prevent foreign matter from entering the pipe while it is being placed in the trench. If the pipe laying crew cannot put the pipe into the trench and in place without getting earth into it, the Engineer may require that before lowering the pipe into the trench, a heavy, tightly woven canvas bag of suitable size be placed over each end and left there until the connection is to be made to the adjacent pipe. If necessary, the line shall be swabbed or flushed out to remove all foreign matter prior to testing.

Before joining lengths of push-on pipe, the inside of the bell and the outside of the spigot shall be thoroughly cleaned to remove oil, grit, excess coating and other foreign matter.

Pipe shall be laid with bell ends being in the direction of laying unless otherwise directed by the Engineer. When pipe is laid on a grade of 10 percent or greater, laying shall start at the bottom and shall proceed upward with the bell ends of the pipe upgrade.

88-185

The cutting of pipe joints for inserting valves, fittings or closure pieces shall be done in a neat manner without damage to the pipe or cement lining and so as to leave a smooth end at right angles to the axis of the pipe.

The deflection at pipe joints to accommodate changes in horizontal or vertical alignment shall be in accordance with the recommendations of the manufacturer. Where bends are called for on the plans, a standard bend may be used with any additional deflection required accomplished by deflecting joints on adjacent pipes.

Bends shall be used only at the locations shown on the plans or at other locations approved by the Engineer. All bends shall be restrained with retainer glands, each way, as indicated on the plans, and shall have poured concrete thrust blocks as shown on the detail plans. Joint deflection for pipe shall be limited to 50% of the Manufacturer's recommended maximum allowable deflection.

Valve boxes shall not transmit shock stress to the valve and shall be centered and plumb over the wrench nut of the valve. The valve box cover shall be flush with the surface of the finished pavement or such other level as may be directed.

Valves set with a depth to operating nut greater than 6 ft (1.8 m) shall be equipped with extension stems providing an operating nut depth of 4.5 ft (1.37 m). Extension stems shall be installed such as to preclude accidental disconnection from the valve, shall stand plumb and shall be supported at the upper end with a centering device attached to the stem or valve box. All gate valves shall be restrained one joint each way unless otherwise noted.

Poured concrete thrust blocks shall be provided at all horizontal bends, mechanical joint caps and tees and all locations indicated on the plans. Joints at fittings where thrust blocks are poured shall be wrapped with polyethylene. All mechanical joints (i.e., valves and fittings) shall be restrained by means of ductile iron retainer glands except where rod type restraint is specifically called for on the plans or ordered by the Engineer. Coverall pipe joint restrainers shall be used on all push-on pipe joints for a distance as indicated on the plans, on each side of all retainer glands. Concrete shall be mixed and placed in accordance with the pertinent section of these Special Provisions.

Restraint of push-on joints shall be accomplished by means of coverall pipe joint restrainers. All set screws shall be torqued to manufacturer's recommendations, proceeding alternately on opposite sides of the pipe.

Mechanical joint retainer glands shall be installed by tightening the tee head bolts. All set screws shall be torqued to manufacturer's recommendations, proceeding alternately on opposite sides of the pipe.

All pipe and fittings shall be laid and tested for defects and leakage as approved by and in the Presence of a Water Department representative.

88-185 ITEM #1303195A

#### 3. Water Main Connections, Temporary Relocations and Abandonment

Where connections are to be made between new water mains and existing water mains, any unspecified materials required for disinfecting and testing the new water main shall be subject to the approval of the Water Department, utilized only after inspection and approval by the Engineer, and shall be at the expense of the contractor. All connections between new mains and existing mains shall be made by only at such times as, and in a manner, approved by the New Britain Water Department. The approximate locations of connections between new mains and existing mains are shown on the drawings; the exact locations will be determined in the field by the Engineer. The contractor shall locate all existing gate valves and adequately restrain them prior to making any connections.

All new water mains shall be disinfected and tested as described herein.

If when making a connection it is required to shut-down a portion of a water main, and such a shut-down is approved by the Water Department, the contractor shall notify all affected property owners of the shut-down.

All temporary relocations of the existing water main shall be approved by the Water Department.

The cutting of an existing water main where connection is to be made to a new water main shall be done in a neat manner so as to leave a smooth end at right angles to the axis of the pipe. The open end of the section of existing water main to be abandoned shall be sealed with concrete and capped.

Abandonment of water facilities shall be as shown on the plans. All open ends of abandoned pipelines or conduits which are created or exposed by the Contractor and that will not be removed from the roadway, shall be sealed with concrete or grout and plugged/capped before backfilling. Valves to be abandoned shall be closed, and the valve boxes which are removed from the roadway shall be properly disposed of by the Contractor. The contractor shall properly dispose of all existing pipe, valves, fittings and other appurtenances that are removed from the trench for the installation of the new main.

All existing water main to be abandoned in place shall be cut and plugged at the locations as directed by the Water Department.

## 4. <u>Disinfection and Testing</u>

Disinfection and testing of the new pipeline shall be performed in accordance with the standards and procedures of the City of New Britain's Water Department.

Pressure testing and leakage testing shall be carried out after the line has been disinfected and shall be in accordance with the appropriate paragraphs of Section 4 of the latest revision of AWWA/ANSI C600 with the following clarifications and qualifications. 1-in (25 mm) Taps shall be provided for testing.

The testing shall be performed after backfilling the completed pipeline. Before testing, the Contractor shall submit in writing to the Engineer, his proposed method of testing the completed pipeline. Testing shall begin only after approval by the Engineer of the proposed methods. Any required coordination with the Water Department shall be the responsibility of the Contractor.

Disinfection shall be carried out in accordance with Method 2 under Methods of Disinfection Pipe in the Connecticut State Department of Health's Bulletin, "Protection and Disinfection of Water Works Pipes and Structures, as required by section 19-13-B47 of the Connecticut State Sanitary Code.

Coordination with the City of New Britain Water Department will be necessary for all work required and shall be the responsibility of the Contractor.

Mains shall be completely flushed before disinfection test until all evidence of sediments is removed. A sodium hypochlorite solution or a mixture of calcium hypochlorite and water shall be applied, with a proper regulating device at the newly laid pipe. Hypochlorite's utilized in this work shall meet the requirements of AWWA B300 of latest revision.

Water from the existing distribution system entering the newly laid pipe shall be controlled to flow slowly during the application of hypochlorite. The rate of sodium hypochlorite application shall be in such proportion to the rate of water flowing through the pipe that the treated water entering the newly laid pipe will have a concentration of chlorine residual of 50 parts per million. There shall be a retention period of at least 24 hours and preferably more. The non-spore forming organisms shall be destroyed, and the chlorine residual after the retention period at the extremity of the pipe shall be at least ten parts per million. When disinfecting newly laid water pipe involving more than one valved section, all valves shall be operated while pipeline is filled with the disinfecting agent. Hydrants and other appurtenances shall also be operated for disinfection. After disinfection, the pipe section shall be flushed until, upon test, the quality of the water, both chemically and bacteriologically, is equal to that of the quality of the water served the public from the existing water supply. The procedure shall be repeated if necessary until the water from the pipe section is satisfactory.

Tests to determine the chlorine residual and the quality of the water in the new pipeline will be performed by the City of New Britain Water Department. It shall be the responsibility of the Contractor to coordinate with the Water Department to arrange for the testing at the proper time. No less than 24 hours notice shall be given when tests are to be performed.

Where connections are to be made between new water mains and existing water mains after disinfection and flushing are completed, new materials shall be swabbed with a suitable hypochlorite solution.

88-185

Alternative methods of disinfection shall be submitted in writing to the Engineer or City Water Department for approval.

A format pressure/leakage test will be required of the water main, valve and fittings in the system. Where any section of a main is provided with concrete thrust block, the test shall not be made until at least five days have elapsed after the concrete was placed. If highearly strength cement is used in the concrete thrust block, the test shall not be made until at least 2 days have elapsed. The pipeline or sections thereof shall be filled with water, and subjected to a pressure/leakage test with water under a hydrostatic pressure of 200-psi (1,379 kPa) unless otherwise specified. This pressure shall be maintained for the duration of the test which shall be 2 hours. Air valves may be used for test connections. Any excessive indicated leakage, as determined by the engineer, shall be located and repaired. The total leakage per day from the pipe line or sections thereof shall not exceed the amounts allowable under AWWA C600-82 Section 13.7. Should the pipeline or sections thereof not come within the permissible leakage limits, the contractor shall be require to excavate and locate the source of leakage and make repairs. After the contractor has notified the engineer that repairs have been made, the test will be repeated until the pipe line or sections thereof are made to satisfactory.

All mains, valves, hydrants, hydrant connections and other appurtenances built under this contract shall upon completion be disinfected in accordance with AWWA Standard C601-81 and the requirements of the Water Department.

Unless otherwise specified, upon flushing the new main, the contractor, under the supervision of the engineer or water department shall take samples of the water and have it tested by an approved laboratory. If said testing proves unsatisfactory, the contractor shall again disinfect the main and retest. Said procedure shall be repeated until satisfactory results are obtained.

The contractor shall furnish all labor, materials, tools and equipment necessary for or incidental to satisfactory disinfecting and leakage testing, and shall be responsible for any damage to the pipeline or to adjoining property due to this work.

The City Water Department will furnish free water for flushing, disinfecting and testing the pipeline.

In order for the Water Department to take samples after the disinfection of the new mains, the contractor shall install 1-in (25-mm) services. Each composed of a corporation stop, bushing, flared fitting, shutoff valve and pipe, of the length and at the locations as ordered by the engineer. After disinfection, efficient time must be allowed, to for the chlorine residual to reach normal. The engineer will then order the services to be turned on, allowed to run for one hour at which time the Water Department will take its samples. The water department reserves the right to allow 24 hours for the testing of each sample. Taking water samples for testing from the hydrants will not be permitted.

88-185

### 5. Tapping Water Main for Service Connections:

All service taps and connections shall be made only at such times as, and in a manner approved by the Water Department. The tap locations will be determined in the field by the Engineer.

### 6. Water Services

Copper water services shall be provided with 4.5 ft (1.37 m) of cover, together with corporation stops, couplings, gate valves and gate boxes.

All existing service laterals shall be either removed or abandoned in place. If the service is to be abandoned in place, the service shall be cut and plugged at the main and at the building or as directed by the engineer.

### 7. Hydrants

Unless otherwise specified all hydrants shall be located as shown on the Contract Drawings, or as directed, in such a manner as to provide complete accessibility.

Hydrants shall be placed behind the curb unless otherwise shown on the Contract Drawings. When placed behind the curb, the hydrant shall be set so that no portion of the hose nozzle cap will be less than 6-in (150-mm) or more than 12-in (300-mm) from the gutter face of the curb. When set in the lawn space between the curb and the sidewalk, or between the sidewalk, and property line, no portion of the hydrant or nozzle cap shall be within 6-in (150-mm) of the sidewalk.

Unless otherwise specified, all hydrants shall stand plumb and shall have their nozzles 90 degrees apart and shall be set with the hose nozzles parallel to the curb and the pumper nozzle facing the curb at an angle of 90 degrees. Hydrants shall be set to the established grade, with nozzles at least 16-in (400-mm) above the ground, as shown or as directed by the Engineer.

Each Hydrant shall be connected to the main by mechanical joint fittings, with a 6-in (150-mm) ductile iron branch controlled by an independent 6-in (150-mm) gate valve.

Whenever the hydrant is set on pervious soil, a drainage pit shall be provided at the base of the hydrant by placing coarse gravel or crushed stone mixed with course sand, from the bottom of the trench to at least 6-in (150-mm) above the waste opening in the hydrant. The diameter of this drainage pit will be minimum of 24-in (600-mm) greater than the hydrant barrel. Felt tar paper or 6 mil polyethylene plastic shall be place on top of the stone to prevent fines from entering the stones.

Whenever a hydrant is set in clay or other impervious soil, a drainage pit 24-in (600-mm) in diameter and 36-in (915-mm) deep shall be excavated below each hydrant and filled with compacted course gravel or crushed stone mixed with course sand. Compacted course gravel or crushed stone mixed with course sand shall also be placed under and around the elbow of the hydrant to a level of 6-in (150-mm) above the waste opening. No

drainage pit shall be connected to a sewer. Felt tar paper or 6 mil polyethylene plastic shall be placed on top of the stone to prevent fines from entering the stones.

The hydrant base elbow shall be set on a 4-in x 8-in x 16-in (100-mm x 200-mm x 400-mm) solid concrete thrust block. A concrete thrust block shall be poured between the base elbow and the undisturbed trench wall.

Hydrants shall be restrained from the hydrant to the tee.

Trench excavation and backfill, installation of water main and appurtenances, testing, disinfection, pavement repair and surface restoration will be carried out as defined in the pertinent sections of these Special Provisions.

Where excavations are to be made in grass covered areas, loam and topsoil shall be carefully removed and separately stored to be used again. Or, if the Contractor prefers not to separate surface materials, he shall finish, as directed, loam and topsoil at least equal in quality to that excavated.

Fire hydrants shall be provided and installed at locations shown on the plans or as directed by the Engineer. Installation shall be as detailed on the plans and as defined in these Special Provisions. All fittings in hydrant assemblies shall be restrained from the tee, and shall be provided with concrete thrust block as shown on the plans.

Gate valve shall be set in accordance with the requirements of the pertinent section of these Special Provisions. Depth of bury shall be as shown on the plans.

All mechanical joints in hydrant leads shall have ductile iron retainer glands.

All push-on joints in hydrant leads shall have coverall pipe joint restrainers.

Concrete masonry unit thrust blocks shall be provided beneath and concrete thrust blocks behind the hydrant bottom. The blocks shall rest against undisturbed earth and shall not obstruct the hydrant drain.

The Contractor shall place and secure a burlap bag over each new hydrant and shall be responsible for maintaining this covering until the hydrant is put into service, at which time the cover shall be removed and disposed of.

All existing hydrants which are removed or replaced shall be salvaged. The hydrant shall be delivered to the Water Department facilities. The Contractor shall be responsible for properly unloading all salvaged materials. All open ends of abandoned pipelines which are created or exposed by the Contractor and will not be removed from the roadway shall be sealed with concrete and capped or plugged before backfilling.

Where the plans call for existing hydrants to be removed, the existing hydrants shall be removed and salvaged. The valve box shall be removed from the road and the open ends of the existing hydrant lead shall be sealed with concrete.

### Remove Hydrant

All existing hydrants to be removed at locations shown on the plans shall be removed along with the branch, valve and valve box.

### 8. Tapping Sleeves/Tapping Gate Valves and gate boxes

The Contractor shall obtain and pay for all City required permits.

The location of the taps shall be where indicated on the plans or as directed by the Engineer. Tapping sleeves shall not be installed until said locations are verified and approved by the Engineer and no work shall be performed without a representative of the City's Water Department present at the tap location.

It shall be the Contractor's responsibility to determine the class, type and outer diameter of the existing water main at the location of each tap. Tapping Sleeves are to be mounted on the water main and properly supported and aligned with the side flange bolts taken up evenly and uniformly. The tapping valve shall be properly supported and positioned and a hydrostatic test of both units conducted before the tap is made.

The existing water main shall be kept in service at all times during the tapping operation.

All taps shall be made by the Water Department, City of New Britain, at the contractor's expense.

Shop drawings of the tapping sleeves and valves shall be submitted to the Engineer for approval before any installation is made.

### 9. Water main Relining

All work done under this section shall be done in accordance with AWWA C602, Standard for Cement-Mortar lining of water pipelines in place – 4 inches (100 mm) and larger, as amended in the appendices, unless otherwise started herein. Any conflict between AWWA C602 and this specification will be resolved at the discretion of the New Britain Water Department.

### **OBSTRUCTIONS**

- A. An Obstruction is defined as any bend, fitting, or other item in the pipeline which hinders the cleaning and lining operation and is not shown or noted on the Drawings or has not been previously field identified.
- B. The Contractor shall make additional openings at Obstructions in order to proceed with the Work.

C. No additional payment will be made to the Contractor for each Obstruction in accordance with Part 4 of this Section. Payment for all work required removing or line from the Obstruction including pipe repair, backfilling, permits, traffic control, etc. will be included in the cost of re-lining the water main.

### WATER MAIN OPENINGS

- A. The Contractor shall open the water mains at:
  - 1. Each end of section to be cleaned and lined
  - 2. At approximate 500 ft (152 m) intervals within any section to be lined.
  - 3. Each location where a new valve or fitting is to be installed.
  - 4. Each hydrant lateral.
  - 5. Obstructions and mismarked mains.
  - 6. Tees, wyes, crosses, branches, and similar fittings.
  - 7. Any other location necessary to perform the Work or directed by the OWNER.
- B. Openings shall be made by:
  - 1. Guillotine saw cuts.
  - 2. A power operated pipe cutter.
  - 3. Removing existing couplings or sleeves, or other approved method resulting in the cut ends of pipe being square and true.
- C. At openings in sections under pressure or in service, the Contractor shall install adequate blocking to prevent movement during the time the pipe is open.

### CONDITION OF WATER MAIN

A. After opening the water main, the owner will determine if the structural condition of the main is suitable for cleaning and lining. If the main exhibits such poor condition (i.e. deteriorated) that cleaning and lining is not justified, the OWNER may either direct the CONTRACTOR to relay the main or to close the main until future restoration work by the OWNER is undertaken.

### PIPE CLEANING

- A. Pipe cleaning shall be accomplished by methods which do not include the use of water and which do not score or otherwise damage the pipes.
- B. All rust, corrosion products, tubercles, deposits, old coatings, oil, grease, dirt, debris and other foreign materials shall be removed by the Contractor to produce a surface satisfactory to the OWNER for application of cement mortar lining.

- C. Old bituminous coatings, shown on the drawings to be lined over, and if satisfactorily adhered to the pipe, may be left in place providing there are no sharp edges between coated and uncoated areas, nor any tuberculation.
- D. Several passages of the cleaning apparatus, in both directions, may be required to produce the specified results. A prover shall be used with the cleaning apparatus.
- E. Nothing shall be left on the pipe surfaces which in any way, or at any time, may harm the cement mortar lining or cause it to be less adherent.
- F. All standing water shall be removed from the pipe.
- G. Material removed from the pipe shall not be discharged to any street gutter system, storm sewer, water course, or sanitary sewer.
- H. Material removed from the pipe and proposed to be used as a portion of the backfill shall be completely dried before such use. This material may not constitute more than 5% of any backfill lift and shall be thoroughly mixed with approved native or borrow backfill materials.
- I. Over-excavation of holes used for pipe cleaning will be permitted to the extent necessary to contain materials cleaned from the pipe and to keep their level below the water main invert. Such over excavation and additional backfill material required therefore will be provided by the Contractor at no additional cost.
- J. At his option, the Contractor may remove the solids cleaned from the mains entirely out of the project area. The Contractor shall dispose of these solids in accordance with applicable laws and ordinances.
- K. The Contractor may also pump the solids to a filtering mechanism at street level. Clean discharge, i.e. Discharge with no color tint or visible solids, from the filter may be discharged to the storm sewer system.
- L. Hand cleaning of short sections of pipe and at fittings is permitted.
- M. The use of swabs will be permitted to remove remaining loose debris and standing water from the main after cleaning.
- N. After pipe cleaning but before the lining operation begins, the OWNER will clear ("Blow-Back") all service laterals on the section of pipe to be lined. The laterals will be back flushed with potable water. Disposal of water accumulating in exactions from the back-flushing is the responsibility of the Contractor. This water shall be considered cleaning residue and shall be handled in accordance with Paragraph G above. The Contractor shall give adequate notice to the OWNER regarding the scheduling of the back-flushing.

### CEMENT MORTAR LINING

- A. The existing 14-in (350-mm) water main shall receive a 0.25-in (6.25-mm) cement mortar lining. In all instances, tolerance for lining thickness shall be plus 0.33-in (8-mm) and minus 0.0625-in (1.56-mm).
- B. Tees, crosses, wyes, and similar branch fittings may be lined through but, in the case of existing fittings allowed to remain by the OWNER, must be exposed for hand cleaning, lining, and inspection. In general, the fittings as discussed herein shall be replaced.
- C. Hydrant laterals will not be cleaned and lined.
- D. As soon as practically possible after a section has been cleaned by the Contractor and blow-back by and to the satisfaction of the OWNER, it shall be cement mortar lined. No lining shall be placed unless the OWNER is present and has inspected the cleaned pipe.
- E. The lining shall consist of one course of continuously applied cement mortar placed by a centrifugal machine. Such machine shall project the mortar against the wall of the pipe without rebound and at a sufficient velocity to cause the mortar to be densely packed and to adhere in place. Hand lining may be used on short pipe pieces and on fittings.
- F. The Contractor shall limit the maximum distance of a cement lining run to approximately 500 ft (152 m).
- G. The mortar shall be mechanically troweled or dragged to produce a satisfactorily and consistently smooth surface, which is on constant thickness.
- H. All openings to the pipe section shall be kept closed by airtight and watertight pipe plugs to prevent air circulation in order to create a moist atmosphere for adequate curing.
- I. The OWNER will inspect all pipelines immediately after the completion of the lining run and notify the Contractor as to acceptability.
- J. Defects including, but not limited to, sand pockets, voids, oversanded areas, excessively cracked areas, areas with lining thinner than specified or exceeding thickness tolerances, and areas of inconsistent, rough, or otherwise unsatisfactory surface finish will be reason for rejection of the lining run unless repaired by the Contractor.

88-185

- K. Repair of defective linings shall be total removal of the defective area from the pipe segment before the lining reaches its initial set. The pipe segment shall then be relined with new cement mortar.
- L. Upon completion of the removal of any defective lining, the Owner shall attempt to clear ("blow back") all service laterals on the affected pipe segment. Should the Owner be unable to blow back any service lateral on the affected pipe segment, the Owner shall attempt to notify the Contractor as to which service laterals remain plugged so Contractor may take appropriate restorative action. Any such action will be at Contractor's expense, and any damage caused by said restorative action will be the sole responsibility of the Contractor.
- M. After the lining operation is completed, and after an approximate 2-hour initial cure, but before final cure, the OWNER will clear ("Blow-Back") all service laterals on the newly lined main. The laterals will be back flushed with potable water. Disposal of this "clean" water for pipelines or excavations is the responsibility of the Contractor.

### PIPE CLOSURE

- A. In general, same size pipe-to-pipe connections shall be made with epoxy coated couplings supplied non-restrained flexible couplings. Restrained mechanical joint sleeves shall be installed at the OWNER's option. Unless noted otherwise on the plans, new air cocks and blow-offs shall be installed at the locations of existing ones.
- B. The pipeline shall be closed and filled by the Contractor within 24 to 48 hours after the completion of the lining. No water pressure other than that imposed by static head elevations shall be applied.
- C. All closure piping work shall be done in the presence of the OWNER.

### PERFORMANCE C-FACTOR TESTING

- A. The Contractor shall make loss of head tests on all newly lined mains after the mains under this Contract have been cleaned and cement-mortar lined. Testing will be performed in order to determine coefficient "C" in the Hazen-Williams formula for the various diameter mains. In addition, the Contractor shall perform up to a total of five C-factor tests prior to cleaning at various times during the project as directed by the OWNER.
- B. Testing shall be coordinated with the OWNER shall be performed continuously during the Contract, and in general shall be performed during flushing associated with OWNER disinfection. The OWNER will operate all street valves.

- C. All testing shall be completed prior to any release of retainage or final payment.
- D. In general, testing will be between hydrants. Static and friction head losses shall be measured with pressure gauges. Flow will be measured by piezometer or OWNER supplied water meter. The Contractor shall supply all piping, fittings, gages, and other materials required for testing.
- E. The Contractor is required to guarantee all cleaned and cement-lined water mains, to the following coefficient "C" class in the Hazen Williams formula, all based on nominal pipe diameter with proper allowance being made for bends and fittings, in accordance with accepted practice.

	Guaranteed Coefficient "C"
Nominal Pipe Diameter	Hazen-Williams Formula
<20" C.I.	130
16" – 20" C.I.	125
12" C.I.	120
10" C.I.	115
8" C.I.	110
6" C.I.	100

- F. For the purpose of establishing "C" coefficients on mains where it is not practicable to carry out the loss-of-head test through the full extent of the cleaned and lined main, the several sections thereof shall be tested and the weighted average coefficient "C" shall be considered to be acceptable for the whole of the cleaned and lined main.
- G. For such cleaned and cement-mortar lined water mains that fail to meet the coefficient "C", determined by loss of head tests, two percent will be deducted from the contract price after the drop of coefficient "C" from one to four points below the guarantee and a one percent additional deduction from the contract price for each two point drop in coefficient "C" thereafter.
- H. For such cleaned and cement-mortar lined water mains that fall below the guaranteed coefficient "C" to the extent of ten points or more because of poor workmanship, the OWNER shall decide whether the deduction in payment shall be made in accordance with the terms indicated above, or if the cement-mortar lined at no added expense to the OWNER.
- I. During flow testing, the Contractor shall protect public and private property from damage which may result from flows out of the hydrants or as discharged water runs down curb-lines.

### 13.00.04 - Method of Measurement:

### Water main and water service Trench Excavation

The water main and water service trench shall be excavated to the proposed pipe grades as shown on the contract drawings. Trench excavation will not be measured for payment.

Backfill and bedding material, including sand, process stone and crushed stone, along with utility identification tape, flowable fill, polyethylene wrap, trench compaction and concrete cradles and thrust blocks will not be measured for payment.

Utility Support, excavation support and dust control will not be paid for separately.

Rock in Trench Excavation will be measured for payment as detailed in Section 02.05 for Form 816.

### Water main

Water main will be measured by the meter of the particular size completed, in place and accepted. Measurement will be along the centerline of pipe and fittings.

Miscellaneous fittings including blow-off assemblies, sterilization corporations, or step couplings, retainer glands, and coverall pipe joint restrainers, plugs or caps of various sizes, concrete thrust blocks, removal of existing water main pipe including fittings and appurtenances, disconnecting existing water main and reconnecting of new main, cutting and capping or plugging of existing water mains will not be measured for payment

Gate valves will be measured by the unit "each" of the particular size, completed, in place, and accepted including the valve box and extension stem.

<u>Air valves</u> will be measured for payment by the unit "each", completed, in place and accepted, including the valve box and extension stem.

### Disinfection and Testing

Disinfection and Testing of water mains and appurtenances and providing Taps and /or temporary thrust restraint associated with testing will not be measured for payment.

### Water Services

Water services will be measured by the unit, each completed, in place and accepted. Each shall include tapping the main, the corporation, the copper service pipe, the curb stop, and the service curb box with rod, as required for the complete installation of the service.

Temporary water service pipe will not be measured for payment.

### **Hvdrants**

Fire hydrant assemblies will be measured as units, complete and accepted. Measurement shall be from and inclusive of the tee at the water main to the back of the hydrant. Units

measured under this item shall include both the installation of new hydrant assemblies and the replacement/relocation of existing hydrant assemblies.

Removal of existing hydrant assemblies and transporting each Hydrant to the New Britain City Water Department Facility shall be included in the unit price for "Hydrant Assembly (Water Main)" item.

Excavation, backfill, removal, salvage/delivery of existing hydrants, removal/disposal of existing materials (i.e., tees, valve boxes, hydrant leads, etc.), abandonment of existing hydrant leads, thrust blocks, connecting sleeves, retainer glands, coverall pipe will not be measured separately for payment.

<u>Tapping Sleeves/Tapping Gate Valves/ Butterfly Valve Assembly and gate boxes</u>
Tapping Sleeves, Tapping Gate Valves with boxes and Butterfly Valve Assembly will be measured for payment by the unit "each", completed, in place and accepted. The tapping

gate valve shall include the valve box and extension stem. The Butterfly Valve Assembly shall include epoxy coated coupling.

### Water main Relining

- A. Cleaning and Lining This work will be measured for payment by the actual number of water main cleaned and cement mortar lined and accepted and measured in place.
- B. Performance C-Factor Testing The Contractor will receive no separate additional payment for C-Factor testing.
- C. Obstructions The Contractor will receive no separate additional payment for obstructions removed by the Contactor.
- D. For removal and disposal of cleaned pipe material, the Contractor will receive no separate additional payment.

### **13.00.05 - Basis of Payment:**

### Water main

All materials including ductile iron pipe water main, ductile iron fittings, air valves, retainer glands and coverall joint pipe restrainers, concrete anchors or thrust blocks, blow-off assemblies, sterilization corporations, step couplings or connecting sleeves, plugs or caps, and all other fittings of various sizes will be paid for at the contract unit price per meter for "Ductile Iron Pipe" of the various size complete and in place.

All work, materials, equipment and excavation necessary to complete the work, including cutting and capping or plugging existing water mains, removal and disposal of existing water main and fittings and appurtenances, disconnecting and reconnecting of the new

main to the existing, gravel and process stone, sand and crushed stone backfill material, backfilling the trench, filter fabric, utility identification tape, flowable fill, polyethylene wrap, compaction, concrete thustblocks, utility support, and all tools, labor, equipment, materials, testing and bedding material shall be included in the contract unit price for "Ductile Iron Pipe (Water main)" of various sizes.

Gate Valves, including boxes, will be paid for at the contract unit price each for "Gate Valve" of the particular size, complete and in place.

The cost for all water mains removed for the installation of the new main shall be included in the price of the new water main. The cost for cutting and plugging existing mains to be abandoned in place shall be included in the cost for the new water main.

### Water Services

All service taps and connections shall be paid for at the contract unit price for each Water Service. The price shall included all work, materials, equipment and excavation necessary to complete the work, including tapping, corporation, copper service pipe, curb stop, service curb box and rod, disconnecting and reconnecting the new service to the new main, excavation, backfilling, sand backfill material, filter fabric, and bedding material shall be included in the contract unit price for each "Water Service".

All work, materials and equipment used for temporary service connections will not be paid for separately, but shall be included in the cost of "Water Service".

All cost for work, materials and equipment used in Utility Support, Excavation and Dust Control will not be paid for separately but shall be included in the cost of the water main pipe.

All water services shall be installed from the main to the building unless otherwise directed by the engineer.

The cost for removing an existing water service and cutting and plugging existing services to be abandoned in place, shall be included in the price of the new water service.

### Disinfection and Testing

Disinfection and Testing of water mains and providing taps and thrust restraint associated with testing will not be paid for separately, but shall be included in the cost the water main pipe.

### **Sterilization Corporations**

Sterilization Corporations will not be paid for separately, but shall be included in the cost the water main pipe.

### Rock in Trench Excavation

Rock in trench excavation work will be paid for at the Contract price for cubic yards of

"Rock in Trench Excavation (water main)". This price shall include all tools, labor, and equipment necessary to complete the excavation in conformance with the plans as ordered. It shall also include disposing of surplus materials. No additional payment will be made for shoring, bracing, sheeting, pumping, and bailing or for materials or equipment used in satisfactory completing the work.

### **Hydrants**

Furnishing and installing Fire Hydrants complete with thrust block, pipe, fittings, mechanical joint retainer glands, coverall pipe, joint restrainers, concrete masonry units, drainage stone, backfill, including labor and equipment used for trench excavation shall be paid for at the Contract Unit Price for "each" Hydrant Assembly (Water main)".

All work related to removing, salvaging and delivering to the Water Department's Facility any hydrants with fittings shall be included in the unit price for "Hydrant Assembly (Water Main)" item.

All work related to resetting hydrants will be paid for under the "Reset Hydrant" item, and will be paid for at the contract unit price "each", complete and in place.

### Air Valves

Air Valves will be paid for at the contract unit price "each", complete and in place. The price shall include the gate box and cover.

Tapping Sleeves/Tapping Gate Valves/ Butterfly Valve Assemblies and gate boxes

Tapping Sleeves, Tapping Gate Valves with boxes and Butterfly Valve Assemblies will be paid for at the contract unit price "each", complete and in place. The price for tapping gate valves shall include the gate box and cover. The price for Butterfly Valve Assembly shall include the epoxy coated coupling.

### Water main Relining

The cleaning and cement-mortar lining of the existing 14-in (350-mm) water main shall be paid for at the contract unit price per meter for "water main relined" complete, in place and accepted. The price shall include Performance C-Factor Testing, obstruction removed by the Contractor.

Pay Item	<u>Pay Unit</u>
Remove Hydrant (Water Main)	EA
Hydrant Assembly (Water Main)	EA

### ITEM #1403501A – RESET MANHOLE (SANITARY SEWER)

Work under these items shall conform to Section 5.07 "Catch Basins, Manholes and Drop Inlets" of the Connecticut Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction (Form 816), amended as follows.

### **5.07.03-Construction Methods:** Add the following:

On precast units the catch basin top and manhole frame shall be set on a minimum of two (2) courses of brick, so that the casting can be adjusted in the future without disturbing the precast sections.

Pay Item	<u>Pay Unit</u>
Reset Manhole (Sanitary Sewer)	EA

088-185 ITEM NO. 1403501A

ITEM # 1700001A – SERVICE CONNECTIONS (ESTIMATED COST)

**Description:** This work shall consist of disconnection, alteration and reconnection of those existing utility services owned by property owners at locations necessary to complete this project

and as ordered by the Engineer. This work shall include the coordination with the affected utility companies and customers. Any damage caused by the Contractor or Subcontractors, as determined by the Engineer, shall be corrected by the Contractor in accordance with this

specification.

Materials: All materials shall be provided by the Contractor and shall meet the current

standards of the affected service.

**Construction Methods:** The Contractor shall perform all work in coordination with the Utility Company and affected property owner and as directed by the Engineer. Certain work may

require use of a licensed and/or certified tradesman when such work is required by local and/or

state codes.

Any utility customer's service interruption shall be done in a way that minimizes adverse impacts

to the customer and affected utility.

Any work and materials supplied by the utility companies shall be on a billable basis to the

Contractor.

**Method of Measurement:** The work and materials shall be measured for payment as provided

for under Article 1.04.05 Extra Work.

The sum of money shown on the estimate and in the itemized proposal as "Estimated Cost" for this work will be considered the price bid even though payment will be made only for actual work performed. The estimated cost figure is not to be altered in any manner by the bidder. Should the bidder alter the amount shown, the altered figure will be disregarded and the original

price will be used to determine the total amount for the contract.

Corrective work required to repair damage caused by the Contractor or its Subcontractors shall

not be measured for payment.

**Basis of Payment:** This work will be paid as Extra Work.

Pay Item

Service Connections (Estimated Cost)

**Estimated Cost** 

### STATE REQUIREMENTS

### **TABLE OF CONTENTS**

_		
	•	-

Non Collusion Affidavit

Bid/Proposal Affidavit

Guarantee Bond - Form AU-766

Certificate of Compliance to Connecticut General Statue Section 31-57b

Certificate of Insurance – CON-32

**Anticipated Source of Material** 

Contractor's Proposed Progress Chart

**DBE** Requirements

Affidavit for the Utilization of Material Supplies or Manufactures

**DBE Participation Approval Request** 

Affirmative Action Program Compliance Form

Required Contract Provisions FHWA Funded Construction Contracts

Federal Wage Determinations

State of Connecticut Department of Labor Wage Determinations

Contractor's Exempt Purchase Certificate

# This Form Cannot Be Substituted NON COLLUSION AFFIDAVIT Connecticut Department of Transportation

This entire document must be completed, notarized and attached to your Bid Proposal. Failure to do so will result in the rejection of your Bid.
A separate affidavit must be submitted by each principal of a Joint Venture. State Project No.(s): F.A.P. No.(s): Town(s) of: Description of Project: \_\_\_\_, acting in behalf of (Name of Person Signing Affidavit) (Name of Bidder i.e. Person or Organization) \_\_\_\_\_, submitting a bid for the above project, certify and affirm in accordance with Part 635.112 of Title 23, U.S. Code of Federal Regulations, that the \_\_\_\_\_\_\_(Name of Bidder i.e. Person or Organization) has neither directly or indirectly entered into any agreements, participated in any collusion nor otherwise taken any action in restraint of free competitive bidding in connection with such bid. False statements made herein may be the subject of criminal prosecution. Name of Bidder (i.e. Person or Organization) Signature and Title of Official Subscribed and sworn to before me, this \_\_\_\_\_ day of \_\_\_\_\_\_. Notary Public/Commissioner of the Superior Court My Commission Expires \_\_\_\_\_ <del>\*</del> Certificate of Authority \_\_\_\_\_, certify that I am (the) (a) \_\_\_\_\_(title) (name) organization named in the foregoing instrument; that I have the authority to affix the seal of the Organization to such papers that require the seal; that \_\_\_\_ signed said instrument on behalf of the Organization was then (the)(a) \_\_\_\_ of said Organization; that said instrument was duly signed for and in behalf of said Organization by authority of its governing body and is within the scope of its organizational powers. (Corporate Seal if applicable) Signature of Certifying Person The person signing the Certificate of Authority portion of this form cannot execute the upper portion of this Affidavit unless the bidder is a legal corporation in which all of the officers' positions are occupied by one person.

### Agree/Contract Identifier:

<u>Bid/Proposal Affidavit</u> Gift/Campaign Contribution Affidavit to Accompany Bid or Proposal for Large State Contracts, Pursuant to Sections 2, 3 and 4 of Public Act 04-245 and Governor M. Jodi Rell's Executive Order No. 1, para 8.

I,					<del></del> ;
myself nor any princi extensively and subst	ring the two-year period pals or key personnel of tantially in the preparation onn. Gen. Stat. § 1-79(e)	the submitting firm n of this bid or pro	n or corporation wo	tho participated sent of the above	l directly, ve gave a
Name of Benefactor	Name of recipient	Gift Descri	ption \(\sigma\)	Value <u>Da</u>	te of Gift
or proposals who partion or preparat	al or state employee of the cipated directly, extensive ion of request for proposa ing authority over the stat	ely, and substantial all or (2) to any publ	ly in the preparation in the propertion of the life in	on of the bid employee who	has
participated directly, ex	I nor any principals or ke ktensively and substantial is gift/campaign contribu	ly in the preparation	_	•	
any principals or key p and substantially in the	the two-year period prece ersonnel of the submitting preparation of this bid of de public office or the Ge is listed below:	g firm or corporation proposal nor any	on who participate agent of the above	ed directly, exte e gave a contrib	ensively oution to
Contributor	Recipient	Amount/ <u>Value</u>	Date of Contribution	Contribution  Description	
Sworn as true to the be	est of my knowledge and l	belief, subject to th	e penalties of fals	e statement.	
Signature			Da	ate	
Sworn and subscribed	before me on this	day of		, 2005	
		Com	missioner of the	Superior Court/	-

Notary Public

Department of Revenue Services Discovery Unit 25 Sigourney Street Hartford CT 06106-5032

Authorized Signature

# Form AU-766 Guarantee Bond

(Rev. 10/05)

**Purpose:** A nonresident contractor working in Connecticut and a surety company licensed to do business in Connecticut use **Form AU-766** to post a guarantee bond with the Department of Revenue Services (DRS) for a specific project in the state. The guarantee bond ensures all taxes due to the State of Connecticut from the contractor are paid to DRS. Read the instructions on the reverse side before you complete this form. If you need help, call **860-541-7538,** Monday through Friday, during business hours.

Part I: Nonresident Contractor In	formation		
Name		Connecticut Tax Registration	on No.
Address (Street or PO Box, City, State, and	d ZIP Code)		
Part II: Person Doing Business V	Vith a Nonresident Contractor Infor	mation	
Name		Connecticut Tax Registration	n No., Federal ID No., or SSN
Address (Street or PO Box, City, State, and	d ZIP Code)		
Part III: Surety Company Informa	ation		
Name		Bond No.	Amount of Bond
Address (Street or PO Box, City, State, and	d ZIP Code)		
Part IV: Project Information	☐ Check the box if this bond is for a ch	nange order.	
Physical Location of Project (Street, City of	or Town)	Name of Project	
Commencement Date	Completion Date for Nonresident Contractor	Total Contract Price or Amo	ount of Change Order
<ul> <li>The nonresident contractor and the sur with DRS to ensure that all taxes that be A bond must be posted within 120 days</li> <li>If the nonresident contractor pays all tax in which the contractor posted the bon</li> <li>This bond jointly and severally binds the assigns for payment of this obligation.</li> <li>Nonresident Contractor Declaration: I, examined Form AU-766 and, to the best of</li> </ul>	detailed above: d into a contract related to real property at a Cety company are posting a bond of 5% of the toecome due and owing during the period of the coff the commencement of the contract or 30 cets, interest, and penalties within three years for the bond expires; otherwise the obligation are nonresident contractor and the surety competition of the contractor contractor named above or its firm the knowledge and belief it is true, complete of not more than \$5,000, or imprisonment for	otal contract price, including the contract will be paid. days after the completion of the month	the contract, whichever is earlier. In succeeding the reporting period administrators, successors, and under the penalty of law that I have the penalty for willfully delivering a
Print Name		Title	
Authorized Signature		Date	
Form AU-766 and, to the best of my know	orized agent of the surety company named ab wledge and belief it is true, complete, and co more than \$5,000, or imprisonment for not m	orrect. I understand the pen ore than five years, or both.	alty for willfully delivering a false
Print Name	Title	Sea	ıl:
	THO		

Date

### **General Instructions**

A nonresident contractor and a surety company licensed to do business in Connecticut must execute **Form AU-766**, *Guarantee Bond*, to post a guarantee bond with the Department of Revenue Services (DRS) for a specific project in Connecticut. A power of attorney for the person signing the bond on behalf of the surety company **must** be attached to the bond, carry the corporate seal of the surety company, and bear the same date as the execution date of the bond.

A nonresident contractor has the option of filing a guarantee bond or a cash bond instead of the customer making a deposit with DRS under Conn. Gen. Stat. §12-430(7)(B). Under this option, the nonresident contractor has 120 days from the commencement of the contract or 30 days after the completion of the contract, whichever is earlier, to file a guarantee bond or a cash bond (Form AU-72) with DRS.

Return Form AU-766 to: Department of Revenue Services
Discovery Unit
25 Sigourney Street
Hartford CT 06106-5032

See **Special Notice 2005(12)**, *Nonresident Contractor Bonds and Deposits*, for more information.

**Nonresident contractor** means a contractor who does not maintain a regular place of business in Connecticut.

### Regular place of business means:

- Any bona fide office, factory, warehouse, or other space in Connecticut at which a contractor is doing business in its own name in a regular and systematic manner; and
- Which place is continuously maintained, occupied, and used by the contractor in carrying on its business through its employees regularly in attendance to carry on the contractor's business in the contractor's own name.

A regular place of business does not include:

- A place of business for a statutory agent for service of process or a temporary office whether or not it is located at the site of construction;
- Locations used by the contractor only for the duration of the contract, such as short-term leased offices, warehouses, storage facilities, or facilities that do not have full time staff with regular business hours; or
- An office maintained, occupied, and used by a person affiliated with a contractor.

**Contract price** means the total contract price, including deposits, amounts held as retainage, costs for any change orders, or charges for add-ons.

Person doing business with a nonresident contractor means any person who makes payments of the contract price to a nonresident contractor, and includes, but is not limited to property owners, governmental, charitable or religious entities, and resident or nonresident general contractors or subcontractors. An owner or tenant of residential real property is not a person doing business with a nonresident contractor and is not required to comply with the provisions of Conn. Gen. Stat. §12-430(7). However, the nonresident contractor doing business with such an owner or tenant must comply with the bond requirements under Conn. Gen. Stat. §12-430(7)(F).

**Commencement of the contract** means the time when the nonresident contractor signs the contract, but, in any event, occurs no later than when the work under the contract actually starts. If a change order is made after the commencement of the original contract, the change order commences when it is signed by the nonresident contractor, but, in any event, occurs no later than when the work under the change order actually starts.

**Completion of the contract** means the time when the nonresident contractor makes the final periodic billing for the contract. The final periodic billing may be due before payment of any retainage becomes due. If a change order is made after the final periodic billing for the original contract, the change order is complete when the nonresident contractor bills for the change order.

**Residential real property** means real property used exclusively for residential purposes and consisting of three or fewer dwelling units in one of which the owner or tenant resides.

Any bond that bears an erasure or alteration, regardless of its nature, must have the change authenticated by a notation in the margin. The notation should describe the correction and be signed in the name of the surety company by the officer who executed the bond and must bear the corporate seal of the surety company.

### **Specific Instructions**

Part I: Enter the name and complete address of the nonresident contractor furnishing the bond. Include the nonresident contractor's Connecticut tax registration number. The name and address of the nonresident contractor appearing on the bond must agree with the name and address on Form REG-1, Business Taxes Registration Application, filed with DRS. (If the information originally provided on Form REG-1 is now incorrect, you must notify the DRS Registration Unit in writing of the correct information.) If the nonresident contractor is a corporation, the corporate name appearing on the bond must be the same shown in the records of the Office of the Secretary of State, or similar agency of another state if the nonresident contractor is not a Connecticut corporation.

Part II: Enter the name and complete address of the person doing business with the nonresident contractor. If the nonresident contractor is the general contractor, enter the name and address of the owner or tenant of the property who has entered the contract. If the nonresident contractor is a subcontractor, enter the name and address of the general contractor.

Enter the Connecticut tax registration number of the person doing business with the nonresident contractor. If the person doing business with the nonresident contractor does not have a Connecticut tax registration number, enter that person's Federal Employer Identification Number or Social Security Number.

**Part III:** Enter the name and complete address of the surety company that guarantees this bond. Include the bond number.

**Part IV:** Check the box if the deposit is for a change order occurring after the bond for the initial contract was furnished to DRS.

Enter the name of the project and the complete address including the street address and the city or town where the project is physically located.

Enter the commencement date of this project or change order.

Enter the date by which the nonresident contractor is expected to complete work on this project or change order.

Enter, in words and figures, the total amount to be paid to the nonresident contractor under the contract. Indicate if this amount is an estimate.

**Declarations:** An authorized representative for the nonresident contractor and the surety company must sign and date the declaration on Form AU-766. The name of the nonresident contractor and the surety company must be exactly as it appears on the bond. The corporate seal of the surety company must be affixed by its signature on Form AU-766.

### STATE OF CONNECTICUT

### Certificate of Compliance with Connecticut General Statute Section 31 - 57b

I hereby certify that all of the statements herein contained below have been examined by me, and to the best of my knowledge and belief are true and correct.

The			HAS / HAS NO	T
	Company Name		(Cross out Non-applicab	
standard, order or regulation procited in accordance with the procitation and such citation has no	omulgated pursuant to such ac visions of any State Occupation of been set aside following app	t, during the sonal Safety as beal to the ap	three year period preceding the land Health Act of 1970, and not a propriate agency of court having	ad Health Act (OSHA) or of any bid, provided such violations were shated within the time fixed by the g jurisdiction or HAS / HAS NOT employee in the three-year period
The list of violations (if applicat	ole) is attached.			
	(Name of Firm	ı, Organizatio	on or Corporation)	
Signed:		Written Signa	4	
	•	Written Signa	ture:	
	Name Typed:		(Corporation Seal)	
Title:	(Title	of Above Per	son, typed)	
	(			
Dated:		1		
State of	)			
County of	)	ss:	A.D., 20	
	)			
Sworn to and personally appeared	ed before me for the above,		(Name of Firm, Organization, C	Corporation)
Signer and Sealer of the foregoi	ng instrument of and acknowle	edged the san	ne to be the free act and deed of	
(Name of Person appearing in fi	ront of Notary or Clerk)	, and his/	her free act and deed as	
(Title of Person appearing in fro	ont of Notary or Clerk)	'		
My Commission Expires:			(Notary Public)	(Seal)

Sec. 31-57b. Awarding of contracts to occupational safety and health law violators **prohibited.** No contract shall be awarded by the state or any of its political subdivisions to any person or firm or any firm, corporation, partnership or association in which such persons or firms have an interest (1) which has been cited for three or more wilful or serious violations of any occupational safety and health act or of any standard, order or regulation promulgated pursuant to such act, during the three-year period preceding the bid, provided such violations were cited in accordance with the provisions of any state occupational safety and health act or the Occupational Safety and Health Act of 1970, and not abated within the time fixed by the citation and such citation has not been set aside following appeal to the appropriate agency or court having jurisdiction or (2) which has received one or more criminal convictions related to the injury or death of any employee in the three-year period preceding the bid. Any person who knowingly provides false information concerning the information required pursuant to this section shall be assessed a civil penalty of not less than five hundred dollars nor more than five thousand dollars and shall be disqualified from bidding on or participating in a contract with the state or any of its political subdivisions for five years from the date of the final determination that the information is false. Any political subdivision or any state agency receiving false information pursuant to this section shall notify the Commissioner of Administrative Services and, upon receipt of such notice, the commissioner shall conduct a hearing in accordance with the provisions of chapter 54. Upon a determination that false information was provided, the commissioner shall impose a civil penalty in accordance with the provisions of this section. Such civil penalty shall be paid to the Treasurer or to an official of the political subdivision, as the case may be. Any civil penalty imposed pursuant to this section may be collected in a civil proceeding by any official of a political subdivision authorized to institute civil actions or, in the case of the state, by the attorney general, upon complaint of the Commissioner of Administrative

Services.

### CON-32 REV. 11/07 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

### CERTIFICATE OF INSURANCE

This is to certify that the Insurance Company named herein has issued to the named insured the policies listed below, that these policies are written in accordance with the Insurance Company's standard policies and endorsements, except as indicated below or as noted in the attachments hereto, which policies and endorsements will be made available to the Department of Transportation upon request, that they provide coverages and limits of liability shown with respect to the hazards indicated, that they are in force on this date, and that this Certificate is furnished in accordance with and for the purpose of satisfying the requirements of the Department of Transportation in connection with the award and the performance of any contract or agreement, or the issuance of any permit or authorization by the Transportation Commissioner or duly authorized agent.

The Insurance Company has a right and duty to defend the insured against any suit seeking damages (or under Workers' Compensation benefits) to which the referenced insurance policy applies and may investigate and settle any claim or suit as they deem appropriate. The Insurance Company's duty to defend or settle any claim or suit ends when the applicable limit of liability has been exhausted in the payment of judgments or settlements.

NAME OF INSURED					
ADDRESS		_ CITY		STATE	
HAZARDS	POLICY	EFFECTIVE	EXPIRATION	COVERAGES AND LIMITS OF I. BODILY INJURY LIABILITY AND DAMAGE LIABILITY	IABILITY PROPERTY
TINEATHOUS	NUMBER	DATE	DATE	ALL PERSONS / ALL DAMAGES EACH ACCIDENT or OCCURRENCE	AGGREGATE
A OWNER'S AND CONTRACTOR'S PROTECTIVE LIABILITY FOR AND IN THE NAME OF THE STATE OF CONN (1)(2) SEE BELOW					
*B COMMERCIAL GENERAL LIABILITY (1) SEE BELOW					
EXPLOSION, COLLAPSE, OR UNDERGROUND DAMAGE LIABILITY(1) SEE BELOW					
AUTOMOBILE LIABILITY OWNED AUTOMOBILES *D HRED AUTOMOBILES NON-OWNED AUTOMOBILES (1) SEE BELOW					
*E RAILROAD PROTECTIVE LIABILITY (1) (2) SEE BELOW					
F EXCESS/UMBRELLA LIABILITY (1) SEE BILOW					
G VALUABLE PAPERS and RECORDS	xxxxxxxxxxx	xxxxxxxx	xxxxxxx	POSSESSION	ALL OTHER
VALUABLE PAPERS and RECORDS					
H BLASTING (I) SEE BELOW			1		
I ** WORKERS' COMPENSATION				STATUTORY COVERAGES AND LIMITS	
J					
Check  Construction Contracts  Permit Work No.	This Certificate is  Lease Agreement Rights o	of Way	Demoli	s of: ition Contracts	
Engineering				Specify & including all operations in	cidental thereto.
	Unit:		Name:	process to morning an optimism	
PARTY FOR NOTICE Bureau:  (1) It is agreed that the herein name suit brought against the State, unle	d Insurance Company will not u			nity in the adjustment of claims or in	the defense of any
(2) It is agreed that the Insurance Cohowever, if named insured is differentialed.	ompany will bill premiums and a ent from the vendor, consultant,	audit charges earne , contractor or par	ed under the prote ty of record, the	ective liability policy(ies) to the above vendor, consultant, contractor or par	ve named insured; rty of record will be
IN THE EVENT OF ANY RE OR MORE OF SAID POLIC	CIES THE			URE TO RENEW ANY ONE	
THAN THIRTY DAYS WRITT REDUCTION IN LIMITS, CAN	EN NOTICE TO THE PART	INSURANCE COMPAN Y FOR NOTICE E TO RENEW.		HIS CERTIFICATE IS ISSUED	OF SUCH
DATED THIS	DAY OF			(Insurance Compa	iny)
ISSUED TO: CONNECTICUT DE	DARTMENIT OF TRANSPORT	'A TION		(Address)	
CONTRACT ADMIN 2800 BERLIN TURI NEWINGTON, CT 0	NISTRATION NPIKE	ATION		(Agency)	
•				(Address)	
Printed on recycled or recovered p	iper.			(Authorized Agent's Name	& Signature)

# ANTICIPATED SOURCE OF MATERIAL CON-083

The attached form *CON-083 Anticipated Source of Material* shall be filled out by the lowest responsible bidder and submitted prior to award of the contract.

# ANTICIPATED SOURCE OF MATERIAL

REV. 8/98 PRINTED ON RECYCLED PAPER

### STATE OF CONNECTICUT

### DEPARTMENT OF TRANSPORTATION

P.O. BOX 317546 NEWINGTON, CT 06111-7546

PROJECT NU	JMBER
TOWN	

MATERIALS	SOURCE OF SUPPLY AND MAILING ADDRESS PG. 1 of 2
AGGREGATES:	
Coarse	
Fine	
BITUMINOUS CONCRETE	
BITUMEN:	
Asphalt Cement	
Asphalt Cutbacks	
Emulsion	•
Tar	
BRICK	
CEMENT - PORTLAND	
Type 1	
Type II	
Type 1A	
Type IIA	
TYPE OF DELIVERY:	*
. Truck	
R.R. Car	
CONCRETE BLOCKS	
CONCRETE, PORTLAND CEMENT	
CURING MATERIAL:	
. Mats	
Paper	
Сотроила	
Other	
DAMPPROOFING and/or WATERPROOFING:	
Primer	
Seal	
Fabric	
FENCE:	
Property or Wire	
Posts: Steel	
Wood	
Chain Link	
Fittings for Chain Link	
GRAVEL	
GUIDE RAIL:	
Wire Rope	
Fittings	
Posts:	
Metal	
Wood	
JOINT FILLER	
JOINT SEALER	
LOAD TRANSFER UNIT	
METAL FLASHING	
METAL BEAM TYPE RAIL (BRIDGE)	
METAL BEAM TYPE RAIL	
METAL BRIDGE RAIL	
OVERHEAD SIGN SUPPORTS	
PAINT:	
2nd Prime Coat (Field)	
1st Field Coat	

MATERIALS	SOURCE OF SUPPLY AND MAILING ADDRESS PG. 2 of 2
PILING:	
Sheets	
Bearing Search	
Pipe	
Wood (Pressure Treated)	
Precast, Prestressed	
PIPE:	
C.C.M.	
Cast Iron	
Reinf, Concrete	
Vitrified Clay	
PRECAST, PRESTRESSED UNITS	•
STEEL	
Sar Mat Fabric and/or Wire Mesh	
Metal Cribbing	
Reinforcement	
Scuppers	
SHEAR CONNECTORS:	
Spiral	
Welded	
STRUCTURAL (BRIDGES)	
STRUCTURAL (Side mounted sign supports)	
-	
	CONTRACTOR
•	
	SIGNED BY
•	DATE

NOTE: items not listed above shall be listed below.

# CONTRACTOR'S PROPOSED PROGRESS CHART—HIGHWAY CONSTRUCTION BAR CHART

roject Number(s):				Town(s) of:	
ate Submitted:		.		Description:	
Operation	Quantity	÷		Duration	
Organization					
Shearing & Grubbing					
arth Excavation					The second secon
Rock Excavation				A STATE OF THE STA	
Channel Excavation					A STATE OF THE PROPERTY OF THE
Borrow	-	-			
Drainage (Trench, Pipe)		-		191	A CALLES TO THE TAXABLE PROPERTY OF TAXABL
Pile Driving					AND THE RESERVE OF THE PROPERTY OF THE PROPERT
Footing					THE PROPERTY OF THE PROPERTY O
Abutments & Wings	-				
Steel Erection					
Floor Slabs			***************************************		
Concrete Pavement					
Bit. Conc. Pavement				The state of the s	
Bridge Railing				A THE PARTY OF THE	
Curbing		-			
Sidewalk				the state of the s	
Fencing		4			
Electrical Work				A PROPERTY OF THE PROPERTY OF	
Traffic Items	•				
Misc. & Clean up					
			_	l l Calendar Days	1,75
Equipment to expect to use:	••			Total Calendar Days:	ar Days:
				Signed By:	

### Schedule 1

# SPECIAL PROVISIONS DISADVANTAGED BUSINESS ENTERPRISES FOR FEDERAL FUNDED PROJECTS

### (For Municipal Advertised and Awarded Projects Only)

Revised-February 26, 2009

NOTE: Certain of the requirements and procedures stated in this Special Provisions are applicable prior to the award and execution of the Contract document.

### I. ABBREVIATIONS AND DEFINITIONS AS USED IN THIS SPECIAL PROVISION

- A. "ConnDOT" means the Connecticut Department of Transportation.
- B. "DOT" means the U.S. Department of Transportation, including the Office of the Secretary, the Federal Highway Administration ("FHWA"), the Federal Transit Administration ("FTA"), and the Federal Aviation Administration ("FAA").
- C. "Broker" means a party acting as an agent for others in negotiating Contracts, Agreements, purchases, sales, etc., in return for a fee or commission.
- D. "Contract," "Agreement" or "subcontract" means a legally binding relationship obligating a seller to furnish supplies or services (including, but not limited to, construction and professional services) and the buyer to pay for them. For the purposes of this provision, a lease for equipment or products is also considered to be a Contract.
- E. "Contractor," means a prime contractor, consultant, second party or any other entity doing business with or engaged by the Municipality or, as the context may require, with or by another Contractor.
- F. "Disadvantaged Business Enterprise" ("DBE") means a small business concern:
  - 1. That is at least fifty-one percent (51%) owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which fifty-one percent (51%) of the stock of which is owned by one or more such individuals; and
  - 2. Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.
- G. "DOT-assisted Contract" means any Contract between a recipient and a Contractor (at any tier) funded in whole or in part with DOT financial assistance, including letters of credit or loan guarantees.

- H. "Good Faith Efforts" means efforts to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement. Refer to Appendix A of 49 Code of Federal Regulation ("CFR") Part 26 "Guidance Concerning Good Faith Efforts," a copy of which is attached to this provision, for guidance as to what constitutes good faith efforts.
- I. "Small Business Concern" means, with respect to firms seeking to participate as DBEs in DOT-assisted Contracts, a small business concern as defined pursuant to Section 3 of the Small Business Act and Small Business Administration ("SBA") regulations implementing it (13 CFR Part 121) that also does not exceed the cap on average annual gross receipts specified in 49 CFR Part 26, Section 26.65(b).
- J. "Socially and Economically Disadvantaged Individuals" means any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is—
  - 1. Any individual who ConnDOT finds on a case-by-case basis to be a socially and economically disadvantaged individual.
  - Any individuals in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:
    - i. "Black Americans," which includes persons having origins in any of the Black racial groups of Africa;
    - ii. "Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
    - "Native Americans," which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
    - iv. "Asian-Pacific Americans," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;
    - v. "Subcontinent Asian Americans," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
    - vi. Women;
    - vii. Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

### II. GENERAL REQUIREMENTS

- A. The Contractor, sub-recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted Contracts. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy, as the Municipality and ConnDOT deem appropriate.
- B. The Contractor shall cooperate with the Municipality, ConnDOT and DOT in implementing the requirements concerning DBE utilization on this Contract in accordance with Title 49 of the Code of Federal Regulations, Part 26 entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs" ("49 CFR Part 26"), as revised. The Contractor shall also cooperate with the Municipality, ConnDOT and DOT in reviewing the Contractor's activities relating to this Special Provision. This Special Provision is in addition to all other equal opportunity employment requirements of this Contract.
- C. The Contractor shall designate a liaison officer who will administer the Contractor's DBE program. Upon execution of this Contract, the name of the liaison officer shall be furnished in writing to the Municipality.
- D. For the purpose of this Special Provision, DBEs to be used to satisfy the DBE goal must be certified by ConnDOT's Division of Contract Compliance for the type(s) of work they will perform.
- E. If the Contractor allows work designated for DBE participation required under the terms of this Contract and required under III-B to be performed by other than the named DBE organization without concurrence from the Municipality, the Municipality will not pay the Contractor for the value of the work performed by organizations other than the designated DBE.
- F. At the completion of all Contract work, the Contractor shall submit a final report to the Municipality indicating the work done by, and the dollars paid to DBEs. If the Contractor does not achieve the specified Contract goals for DBE participation, the Contractor shall also submit written documentation to the Municipality detailing its good faith efforts to satisfy the goal that were made during the performance of the Contract. Documentation is to include, but not be limited to the following:
  - A detailed statement of the efforts made to select additional subcontracting opportunities to be performed by DBEs in order to increase the likelihood of achieving the stated goal.
  - 2. A detailed statement, including documentation of the efforts made to contact and solicit bids with ConnDOT certified DBEs, including the names, addresses, dates and telephone numbers of each DBE contacted, and a description of the information provided to each DBE regarding the scope of services and anticipated time schedule of work items proposed to be subcontracted and nature of response from firms contacted.
  - Provide a detailed statement for each DBE that submitted a subcontract proposal, which the Contractor considered not to be acceptable stating the reasons for this conclusion.

- 4. Provide documents to support contacts made with ConnDOT requesting assistance in satisfying the Contract specified goal.
- 5. Provide documentation of all other efforts undertaken by the Contractor to meet the defined goal.
- G. Failure of the Contractor, at the completion of all Contract work, to have at least the specified percentage of this Contract performed by DBEs as required in III-B will result in the reduction in Contract payments to the Contractor by an amount determined by multiplying the total Contract value by the specified percentage required in III-B and subtracting from that result, the dollar payments for the work actually performed by DBEs. However, in instances where the Contractor can adequately document or substantiate its good faith efforts made to meet the specified percentage to the satisfaction of the Municipality and ConnDOT, no reduction in payments will be imposed.
- H. All records must be retained for a period of three (3) years following acceptance by the Municipality of the Contract and shall be available at reasonable times and places for inspection by authorized representatives of the Municipality, ConnDOT and Federal agencies. If any litigation, claim, or audit is started before the expiration of the three (3) year period, the records shall be retained until all litigation, claims, or audits findings involving the records are resolved.
- I. Nothing contained herein, is intended to relieve any Contractor or subcontractor or material supplier or manufacturer from compliance with all applicable Federal and State legislation or provisions concerning equal employment opportunity, affirmative action, nondiscrimination and related subjects during the term of this Contract.

### III. SPECIFIC REQUIREMENTS:

In order to increase the participation of DBEs, the Municipality requires the following:

- A. The Contractor shall assure that certified DBEs will have an opportunity to compete for subcontract work on this Contract, particularly by arranging solicitations and time for the preparation of proposals for services to be provided so as to facilitate the participation of DBEs regardless if a Contract goal is specified or not.
- B. The DBE contract goal percentage for the Project is 10% (Construction) and 0% (Construction Inspection). The goal shall be shall be based upon the total contract value. Compliance with this provision may be fulfilled when a DBE or any combination of DBEs perform work under contract in accordance with 49 CFR Part 26, Subpart C Section 26.55, as revised. Only work actually performed by and/or services provided by DBEs which are certified for such work and/or services can be counted toward the DBE goal. Supplies and equipment a DBE purchases or leases from the prime Contractor or its affiliate cannot be counted toward the goal.

If the Contractor does not document commitments, by subcontracting and/or procurement of material and/or services that at least equal the goal, it must document the good faith efforts that outline the steps it took to meet the goal in accordance with VII.

C. Within 7 days after the bid opening, the low bidder shall indicate in writing to the Municipality, on the forms provided, the DBE(s) it will use to achieve the goal indicated in III-B. The submission shall include the name and address of each DBE that will participate in this Contract, a description of the work each will perform, the dollar amount of participation, and the percentage this is of the

bid amount. This information shall be signed by the named DBE and the low bidder. The named DBE shall be from a list of certified DBEs available from ConnDOT. In addition, the named DBE(s) shall be certified to perform the type of work they will be contracted to do.

D. The prime Contractor shall submit to the Municipality all requests for subcontractor approvals on the standard forms provided by the Municipality.

If the request for approval is for a DBE subcontractor for the purpose of meeting the Contract DBE goal, a copy of the legal Contract between the prime and the DBE subcontractor must be submitted along with the request for subcontractor approval. Any subsequent amendments or modifications of the Contract between the prime and the DBE subcontractor must also be submitted to the Municipality with an explanation of the change(s). The Contract must show items of work to be performed, unit prices and, if a partial item, the work involved by all parties.

In addition, the following documents are to be attached:

- 1. An explanation indicating who will purchase material.
- 2. A statement explaining any method or arrangement for renting equipment. If rental is from a prime, a copy of the Rental Agreement must be submitted.
- 3. A statement addressing any special arrangements for manpower.
- E. The Contractor is required, should there be a change in a DBE they submitted in III-C, to submit documentation to the Municipality which will substantiate and justify the change (i.e., documentation to provide a basis for the change for review and approval by the Municipality) prior to the implementation of the change. The Contractor must demonstrate that the originally named DBE is unable to perform in conformity to the scope of service or is unwilling to perform, or is in default of its Contract, or is overextended on other jobs. The Contractor's ability to negotiate a more advantageous Agreement with another subcontractor is not a valid basis for change. Documentation shall include a letter of release from the originally named DBE indicating the reason(s) for the release.
- F. Contractors subcontracting with DBEs to perform work or services as required by this Special Provision shall not terminate such firms without advising the Municipality in writing, and providing adequate documentation to substantiate the reasons for termination if the DBE has not started or completed the work or the services for which it has been contracted to perform.
- G. When a DBE is unable or unwilling to perform, or is terminated for just cause, the Contractor shall make good faith efforts to find other DBE opportunities to increase DBE participation to the extent necessary to at least satisfy the goal required by III-B.
- H. In instances where an alternate DBE is proposed, a revised submission to the Municipality together with the documentation required in III-C, III-D, and III-E, must be made for its review and approval.
- Each quarter after execution of the Contract, the Contractor shall submit a report to the Municipality indicating the work done by, and the dollars paid to the DBE for the current quarter and to date.
- J. Each contract that the Municipality signs with a Contractor and each subcontract the Contractor signs with a subcontractor must include the following assurance: The contractor, sub recipient

or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

### IV. MATERIAL SUPPLIERS OR MANUFACTURERS

- A. If the Contractor elects to utilize a DBE supplier or manufacturer to satisfy a portion or all of the specified DBE goal, the Contractor must provide the Municipality with:
  - An executed "Affidavit for the Utilization of Material Suppliers or Manufacturers" (sample attached), and
  - 2. Substantiation of payments made to the supplier or manufacturer for materials used on the project.
- B. Credit for DBE suppliers is limited to 60% of the value of the material to be supplied, provided such material is obtained from a regular DBE dealer. A regular dealer is a firm that owns, operates, or maintains a store, warehouse or other establishment in which the materials or supplies required for the performance of the Contract are bought, kept in stock and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the firm must engage in, as its principal business, and in its own name, the purchase and sale of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone and petroleum products, need not keep such products in stock if it owns or operates distribution equipment. Brokers and packagers shall not be regarded as material suppliers or manufacturers.
- C. Credit for DBE manufacturers is 100% of the value of the manufactured product. A manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Municipality, Department of Transportation or Contractor.

## V. NON-MANUFACTURING OR NON-SUPPLIER DBE CREDIT:

- A. Contractors may count towards their DBE goals the following expenditures with DBEs that are not manufacturers or suppliers:
- 1. Reasonable fees or commissions charged for providing a <u>bona fide</u> service such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment materials or supplies necessary for the performance of the Contract, provided that the fee or commission is determined by the Municipality to be reasonable and consistent with fees customarily allowed for similar services.
- 2. The fees charged for delivery of materials and supplies required on a job site (but not the cost of the materials and supplies themselves) when the hauler, trucker, or delivery service is a DBE but is not also the manufacturer of or a regular dealer in the materials and supplies, provided that the fees are determined by the Municipality to be reasonable and not excessive as compared with fees customarily allowed for similar services.
- 3. The fees or commissions charged for providing bonds or insurance specifically required for the performance of the Contract, provided that the fees or commissions are determined by the

Municipality to be reasonable and not excessive as compared with fees customarily allowed for similar services.

### VI. BROKERING

- A. Brokering of work by DBEs who have been approved to perform subcontract work with their own workforce and equipment is not allowed, and is a Contract violation.
- B. DBEs involved in the brokering of subcontract work that they were approved to perform may be decertified.
- C. Firms involved in the brokering of work, whether they are DBEs and/or majority firms who engage in willful falsification, distortion or misrepresentation with respect to any facts related to the project shall be referred to the U.S. Department of Transportation's Office of the Inspector General for prosecution under Title 18, U.S. Code, Section 10.20.

### VII. REVIEW OF PRE-AWARD GOOD FAITH EFFORTS

A. If the Contractor does not document pre-award commitments by subcontracting and/or procurement of material and/or services that at least equal the goal stipulated in III-B, the Contractor must document the good faith efforts that outline the specific steps it took to meet the goal. The Contract will be awarded to the Contractor if its good faith efforts are deemed satisfactory and approved by CompDOT. To obtain such an exception, the Contractor must submit an application to the Municipality, which documents the specific good faith efforts that were made to meet the DBE goal. Application form for Review of Pre-Award Good Faith Efforts is attached hereto.

The application must include the following documentation:

- a statement setting forth in detail which parts, if any, of the Contract were reserved by the Contractor and not available for bid by subcontractors;
- 2. a statement setting forth all parts of the Contract that are likely to be sublet;
- 3. a statement setting forth in detail the efforts made to select subcontracting work in order to likely achieve the stated goal;
- 4. copies of all letters sent to DBEs;
- 5. a statement listing the dates and DBEs that were contacted by telephone and the result of each contact;
- a statement listing the dates and DBEs that were contacted by means other than telephone and the result of each contact;
- 7. copies of letters received from DBEs in which they declined to bid;
- a statement setting forth the facts with respect to each DBE bid received and the reason(s)
  any such bid was declined;
- a statement setting forth the dates that calls were made to ConnDOT's Division of Contract Compliance seeking DBE referrals and the result of each such call; and

10. any information of a similar nature relevant to the application.

The review of the Contractor's good faith efforts may require an extension of time for award of the Contract. In such a circumstance, and in the absence of other reasons not to grant the extension or make the award, the Municipality will agree to the needed extension(s) of time for the award of the Contract, provided the Contractor and the surety also agree to such extension(s).

- B. Upon receipt of the submission of an application for review of pre-award good faith efforts, the Municipality shall submit the documentation to ConnDOT initiating unit for submission to the ConnDOT Division of Contract Compliance. ConnDOT Division of Contract Compliance will review the documents and determine if the package is complete, accurate and adequately documents the Contractor's good faith efforts. Within fourteen (14) days of receipt of the documentation, the ConnDOT Division of Contract Compliance shall notify the Contractor by certified mail of the approval or denial of its good faith efforts.
- C. If the Contractor's application is denied, the Contractor shall have seven (7) days upon receipt of written notification of denial to request administrative reconsideration. The Contractor's request for administrative reconsideration should be sent in writing to the Municipality. The Municipality will forward the Contractor's reconsideration request to the ConnDOT initiating unit for submission to the DBE Screening Committee. The DBE Screening Committee will schedule a meeting within fourteen (14) days from receipt of the Contractors request for administrative reconsideration and advise the Contractor of the date, time and location of the meeting. At this meeting, the Contractor will be provided with the opportunity to present written documentation and/or argument concerning the issue of whether it made adequate good faith efforts to meet the goal. Within seven (7) days following the reconsideration meeting, the chairperson of the DBE Screening Committee will send the Contractor, via certified mail, a written decision on its reconsideration request, explaining the basis of finding either for or against the request. The DBE Screening Committee's decision is final. If the reconsideration is denied, the Contractor shall indicate in writing to the Municipality within fourteen (14) days of receipt of the written notification of denial, the DBEs it will use to achieve the goal indicated in III-B.
- D. Approval of pre-award good faith efforts does not relieve the Contractor from its obligation to make additional good faith efforts to achieve the DBE goal should contracting opportunities arise during actual performance of the Contract work.

### APPENDIX A TO 49 CFR PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

- I. When, as a recipient, you establish a Contract goal on a DOT-assisted Contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.
- II. In any situation in which you have established a Contract goal, Part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE Contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE Contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.
- III. The Department also strongly cautions you against requiring that a bidder meet a Contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a Contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
  - A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the Contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
  - B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out Contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.

- C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the Contract in a timely manner to assist them in responding to a solicitation.
- D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional Agreements could not be reached for DBEs to perform the work.
  - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as Contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the Contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime Contractor to perform the work of a Contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime Contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
- E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the project goal.
- F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- H. Effectively using the services of available minority/women community organizations; minority/women Contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the Contract. For example, when the apparent successful bidder fails to meet the Contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

## AFFIDAVIT FOR THE UTILIZATION OF MATERIAL SUPPLIERS OR MANUFACTURERS

This affidavit must be completed by the Municipality Contractor's DBE notarized and attached to the Contractor's request to utilize a DBE supplier or manufacturer as a credit towards its DBE Contract requirements; failure to do so will result in not receiving credit towards the Contract DBE requirement.

State Project No. Federal Aid Project No. Description of Project acting in behalf of (DBE person, firm, association or organization) (Name of person signing Affidavit) certify and affirm that of which I am the (DBE person, firm, association or organization) (Title of Person) is a certified Connecticut Department of Transportation DBE. I further certify and affirm that I have read and understand 49 CFR, Sec. 26.55(e)(2), as the same may be revised. will assume the actual and I further certify and affirm that (DBE person, firm, association or organization) contractual responsibility for the provision of the materials and/or supplies sought by (Municipality Contractor) If a manufacturer, I produce goods from raw materials or substantially alter them before resale, or if a supplier, I perform a commercially useful function in the supply process. I understand that false statements made herein are punishable by Law (Sec. 53a-157), CGS, as revised). (Name of Organization or Firm) (Signature & Title of Official making the Affidavit) Subscribed and sworn to before me, this \_\_\_\_ Notary Public (Commissioner of the Superior Court) My Commission Expires CERTIFICATE OF CORPORATION (Official) , certify that I am the \_\_\_ of the Organization named in the foregoing instrument; that I have been duly authorized to affix the seal of the Organization to such papers as , who signed said instrument on behalf of the Organization, was then of said Organization; that said instrument was duly signed for and in behalf of said Organization by authority of its governing body and is within the scope of its organizational powers. (Date) (Signature of Person Certifying)

## CONNECTICUT DEPARTMENT OF TRANSPORTATION

## DBE PARTICIPATION APPROVAL REQUEST

(REV\_DATE 08/08)

#### TO BE SUBMITTED WITHIN THE TIME FRAME INDICATED BY THE BID DOCUMENTS.

Submit this form with ORIGINAL SIGNATURES for approval			Sheet		of
ConnDOT Project No.:					
Prime Contractor:	Town(s) of:		_		
FEIN Number:					
Date of Bid Opening:	Proposed DBE Subcontractor:				
Date of Submittal:	FEIN Number:		_		
	Full Company Address:				
	Phone Number:		_		
Original Contract Dollar Amount:	Subcontracted to this Firm:		Proposed Percent of Contract	ct to be Subcontracted:	
Item Number & Description	Firm Type Code (S, M, P, T, or V)	Quantity and Unit for Item Subcontracted	<u>Item</u> <u>Total Price</u>	Dollar Amount to be Subcontracted *	If Supply Item Indicate 60% of Value
	<del></del>				
Are any items Partial? (* Note: If yes, an explanation of the sub-	contractor's involvement must be inclu	ded.)	YES*	NO	
*Is any portion of this DBE proposed work being further subcontract	cted? YES*	amoun	t NO	_	
If YES, is the second tier subcontractor a DBE? If YES please provide DBE form.	YES*	NO			
Approval is requested for the above firm to perform as:					
Check all that apply (Firm Type Code): Subcontractor	(S) Manufacturer (M)	Supplier (P)	Trucking (T)	Service (V)	
Signature of Prime Contractor, Title	<u> </u>	Signature of Su	bcontractor, Title	_	

## AFFIRMATIVE ACTION PROGRAM CERTIFICATION

	City/Town of	AN
	Firm Name:	a recommende
	Address:	
	Project Description:	
	Bid Amount:	
	Date:	
<u> </u>	of	
(Name of Persintend to honor our Affirs Transportation, Office of Program is current and tha	on) (Name of Firm) native Action Program on file with the Connecticut Depar Contract Compliance. I further certify that our Affirmativ the last approval was on (Date)	e Action
	Signed By:	
	Title:	
	EEO Officer:	

## Construction Contracts - Required Contract Provisions (FHWA Funded Contracts)

#### **Index**

- 1. Federal Highway Administration (FHWA) Form 1273 (Revised May 1, 2012)
- 2. Title VI of the Civil Rights Act of 1964 / Nondiscrimination Requirements
- 3. Contractor Work Force Utilization (Federal Executive Order 11246) / Specific Equal Employment Opportunity
- 4. Requirements of Title 49, CFR, Part 26, Participation by DBEs
- 5. Contract Wage Rates
- 6. Americans with Disabilities Act of 1990, as Amended
- 7. Connecticut Statutory Labor Requirements
  - a. Construction, Alteration or Repair of Public Works Projects; Wage Rates
  - b. Debarment List Limitation on Awarding Contracts
  - c. Construction Safety and Health Course
  - d. Awarding of Contracts to Occupational Safety and Health Law Violators Prohibited
  - e. Residents Preference in Work on Other Public Facilities (Not Applicable to Federal Aid Contracts)
- 8. Tax Liability Contractor's Exempt Purchase Certificate (CERT 141)
- 9. Executive Orders (State of CT)
- 10. Non Discrimination Requirement (pursuant to section 4a-60 and 4a-60a of the Connecticut General Statutes, as revised)
- 11. Whistleblower Provision
- 12. Connecticut Freedom of Information Act
  - a. Disclosure of Records
  - b. Confidential Information
- 13. Service of Process
- 14. Substitution of Securities for Retainages on State Contracts and Subcontracts
- 15. Health Insurance Portability and Accountability Act of 1996 (HIPAA)
- 16. Forum and Choice of Law
- 17. Summary of State Ethics Laws

- 18. Audit and Inspection of Plants, Places of Business and Records
- 19. Campaign Contribution Restriction
- 20. Tangible Personal Property
- 21. Bid Rigging and/or Fraud Notice to Contractor
- 22. Consulting Agreement Affidavit
- 23. Federal Cargo Preference Act Requirements (46 CFR 381.7(a)-(b))

### **Index of Exhibits**

- EXHIBIT A FHWA Form 1273 (Begins on page 14)
- EXHIBIT B Title VI Contractor Assurances (page 35)
- EXHIBIT C Contractor Work Force Utilization (Federal Executive Order 11246) / Equal Employment Opportunity (page 36)
- EXHIBIT D Health Insurance Portability and Accountability Act of 1996 (HIPAA) (page 43)
- EXHIBIT E Campaign Contribution Restriction (page 51)
- EXHIBIT F Federal Wage Rates (Attached at the end)
- EXHIBIT G State Wage Rates (Attached at the end)

#### 1. Federal Highway Administration (FHWA) Form 1273

The Contractor shall comply with the Federal Highway Administration (FHWA), Form 1273 attached at Exhibit A, as revised, which is hereby made part of this contract. The Contractor shall also require its subcontractors to comply with the FHWA – Form 1273 and include the FHWA – Form 1273 as an attachment to all subcontracts and purchase orders.

## 2. Title VI of the Civil Rights Act of 1964 / Nondiscrimination Requirements

The Contractor shall comply with Title VI of the Civil Rights Act of 1964 as amended (42 U.S.C. 2000 et seq.), all requirements imposed by the regulations of the United States Department of Transportation (49 CFR Part 21) issued in implementation thereof, and the Title VI Contractor Assurances attached hereto at Exhibit B, all of which are hereby made a part of this Contract.

## 3. Contractor Work Force Utilization (Federal Executive Order 11246) / Equal Employment Opportunity

- (a) The Contractor shall comply with the Contractor Work Force Utilization (Federal Executive Order 11246) / Equal Employment Opportunity requirements attached at Exhibit C and hereby made part of this Contract, whenever a contractor or subcontractor at any tier performs construction work in excess of \$10,000. These goals shall be included in each contract and subcontract. Goal achievement is calculated for each trade using the hours worked under each trade.
- (b) Companies with contracts, agreements or purchase orders valued at \$10,000 or more will develop and implement an Affirmative Action Plan utilizing the ConnDOT Affirmative Action Plan Guideline. This Plan shall be designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex or national origin, and to promote the full realization of equal employment opportunity through a positive continuation program. Plans shall be updated as required by ConnDOT.

## 4. Requirements of Title 49, Code of Federal Regulations (CFR), Part 26, Participation by DBEs

Pursuant to 49 CFR 26.13, the following paragraph is part of this Contract and shall be included in each subcontract the Contractor enters into with a subcontractor:

"The Contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26, Participation by DBEs, in the award and administration of U.S. DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this contract or such other remedy as ConnDOT (recipient) deems appropriate."

### 5. Contract Wage Rates

The Contractor shall comply with:

The Federal and State wage rate requirements indicated in Exhibits F and G hereof, as revised, are hereby made part of this Contract. The Federal wage rates (Davis-Bacon Act) applicable to this Contract shall be the Federal wage rates that are current on the US Department of Labor website

(<a href="http://www.wdol.gov/dba.aspx">http://www.wdol.gov/dba.aspx</a>) as may be revised 10 days prior to bid opening. These applicable Federal wage rates will be physically incorporated in the final contract document executed by both parties. The Department will no longer physically include revised Federal wage rates in the bid documents or as part of addenda documents, prior to the bid opening date. During the bid advertisement period, bidders are responsible for obtaining the appropriate Federal wage rates from the US Department of Labor website.

To obtain the latest Federal wage rates go to the US Department of Labor website (link above). Under Davis-Bacon Act, choose "Selecting DBA WDs" and follow the instruction to search the latest wage rates for the State, County and Construction Type. Refer to the Notice to Contractor (NTC) - Federal Wage Determinations (Davis Bacon Act).

If a conflict exists between the Federal and State wage rates, the higher rate shall govern.

Prevailing Wages for Work on State Highways; Annual Adjustments. With respect to contracts for work on state highways and bridges on state highways, the Contractor shall comply with the provisions of Section 31-54 and 31-55a of the Connecticut General Statutes, as revised.

As required by Section 1.05.12 (Payrolls) of the State of Connecticut, Department of Transportation's Standard Specification for Roads, Bridges and Incidental Construction (FORM 816), as may be revised, every Contractor or subcontractor performing project work on a Federal aid project is required to post the relevant prevailing wage rates as determined by the United States Secretary of Labor. The wage rate determinations shall be posted in prominent and easily accessible places at the work site.

#### 6. Americans with Disabilities Act of 1990, as Amended

This provision applies to those Contractors who are or will be responsible for compliance with the terms of the Americans with Disabilities Act of 1990, as amended (42 U.S.C. 12101 et seq.), (Act), during the term of the Contract. The Contractor represents that it is familiar with the terms of this Act and that it is in compliance with the Act. Failure of the Contractor to satisfy this standard as the same applies to performance under this Contract, either now or during the term of the Contract as it may be amended, will render the Contract voidable at the option of the State upon notice to the contractor. The Contractor warrants that it will hold the State harmless and indemnify the State from any liability which may be imposed upon the State as a result of any failure of the Contractor to be in compliance with this Act, as the same applies to performance under this Contract.

#### 7. Connecticut Statutory Labor Requirements

(a) Construction, Alteration or Repair of Public Works Projects; Wage Rates. The Contractor shall comply with Section 31-53 of the Connecticut General Statutes, as revised. The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in subsection (i) of section 31-53 of the Connecticut General Statutes, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

- **(b) Debarment List. Limitation on Awarding Contracts.** The Contractor shall comply with Section 31-53a of the Connecticut General Statutes, as revised.
- (c) Construction Safety and Health Course. The Contractor shall comply with section 31-53b of the Connecticut General Statutes, as revised. The contractor shall furnish proof to the Labor Commissioner with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 of the Connecticut General Statutes, as revised, on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

Any employee required to complete a construction safety and health course as required that has not completed the course, shall have a maximum of fourteen (14) days to complete the course. If the employee has not been brought into compliance, they shall be removed from the project until such time as they have completed the required training.

Any costs associated with this notice shall be included in the general cost of the contract. In addition, there shall be no time granted to the contractor for compliance with this notice. The contractor's compliance with this notice and any associated regulations shall not be grounds for claims as outlined in Section 1.11 – "Claims".

- (d) Awarding of Contracts to Occupational Safety and Health Law Violators Prohibited. The Contract is subject to Section 31-57b of the Connecticut General Statutes, as revised.
- (e) Residents Preference in Work on Other Public Facilities. NOT APPLICABLE TO FEDERAL AID CONTRACTS. Pursuant to Section 31-52a of the Connecticut General Statutes, as revised, in the employment of mechanics, laborers or workmen to perform the work specified herein, preference shall be given to residents of the state who are, and continuously for at least six months prior to the date hereof have been, residents of this state, and if no such person is available, then to residents of other states

## 8. Tax Liability - Contractor's Exempt Purchase Certificate (CERT – 141)

The Contractor shall comply with Chapter 219 of the Connecticut General Statutes pertaining to tangible personal property or services rendered that is/are subject to sales tax. The Contractor is responsible for determining its tax liability. If the Contractor purchases materials or supplies pursuant to the Connecticut Department of Revenue Services' "Contractor's Exempt Purchase Certificate (CERT-141)," as may be revised, the Contractor acknowledges and agrees that title to such materials and supplies installed or placed in the project will vest in the State simultaneously with passage of title from the retailers or vendors thereof, and the Contractor will have no property rights in the materials and supplies purchased.

Forms and instructions are available anytime by:

Internet: Visit the DRS website at www.ct.gov/DRS to download and print Connecticut tax forms; or

Telephone: Call 1-800-382-9463 (Connecticut calls outside the Greater Hartford calling area only) and select Option 2 or call 860-297-4753 (from anywhere).

### 9. Executive Orders

This contract is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of the contract as if they had been fully set forth in it. The contract may also be subject to Executive Order No. 14 of Governor M. Jodi Rell, promulgated April 17, 2006, concerning procurement of cleaning products and services and to Executive Order No. 49 of Governor Dannel P. Malloy, promulgated May 22, 2015, mandating disclosure of certain gifts to public employees and contributions to certain candidates for office. If Executive Order No. 14 and/or Executive Order No. 49 are applicable, they are deemed to be incorporated into and are made a part of the contract as if they had been fully set forth in it. At the Contractor's request, the Department shall provide a copy of these orders to the Contractor.

- 10. Non Discrimination Requirement (pursuant to section 4a-60 and 4a-60a of the Connecticut General Statutes, as revised): References to "minority business enterprises" in this Section are not applicable to Federal-aid projects/contracts. Federal-aid projects/contracts are instead subject to the Federal Disadvantaged Business Enterprise Program.
  - (a) For purposes of this Section, the following terms are defined as follows:
    - i. "Commission" means the Commission on Human Rights and Opportunities;
    - ii. "Contract" and "contract" include any extension or modification of the Contract or contract;
    - iii. "Contractor" and "contractor" include any successors or assigns of the Contractor or contractor:
    - iv. "gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender-related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose.
    - v. "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;
    - vi. "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;
    - vii. "marital status" means being single, married as recognized by the State of Connecticut, widowed, separated or divorced;
    - viii. "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;

- ix. "minority business enterprise" means any small contractor or supplier of materials fiftyone percent or more of the capital stock, if any, or assets of which is owned by a person or
  persons: (1) who are active in the daily affairs of the enterprise, (2) who have the power
  to direct the management and policies of the enterprise, and (3) who are members of a
  minority, as such term is defined in subsection (a) of Connecticut General Statutes § 329n; and
- x. "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this Section, the terms "Contract" and "contract" do not include a contract where each contractor is (1) a political subdivision of the State, including, but not limited to, a municipality, (2) a quasi-public agency, as defined in Conn. Gen. Stat. Section 1-120, (3) any other state, including but not limited to any federally recognized Indian tribal governments, as defined in Conn. Gen. Stat. Section 1-267, (4) the federal government, (5) a foreign government, or (6) an agency of a subdivision, agency, state or government described in the immediately preceding enumerated items (1), (2), (3), (4) or (5).

(b) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut; and the Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Contractor agrees to provide each labor union or representative of workers with which the Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which the Contractor has a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Contractor's commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this Section and Connecticut General Statutes §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes §§ 46a-56, 46a-68e and 46a-68f; and (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this Section and Connecticut General Statutes § 46a-56. If the contract is a public works contract, the Contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works projects.

- (c) Determination of the Contractor's good faith efforts shall include, but shall not be limited to, the following factors: The Contractor's employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.
- (d) The Contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.
- (e) The Contractor shall include the provisions of subsection (b) of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes §46a-56; provided if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.
- (f) The Contractor agrees to comply with the regulations referred to in this Section as they exist on the date of this Contract and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.
- (g) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes § 46a-56; and (4) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor which relate to the provisions of this Section and Connecticut General Statutes § 46a-56.
- (h) The Contractor shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes § 46a-56; provided, if such Contractor becomes involved in, or is threatened with,

litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter."

The Nondiscrimination Certifications can be found at the Office of Policy and Management website.

## http://www.ct.gov/opm/cwp/view.asp?a=2982&Q=390928

#### 11. Whistleblower Provision

The following clause is applicable if the Contract has a value of Five Million Dollars (\$5,000,000) or more.

Whistleblowing. This Contract may be subject to the provisions of Section 4-61dd of the Connecticut General Statutes. In accordance with this statute, if an officer, employee or appointing authority of the Contractor takes or threatens to take any personnel action against any employee of the Contractor in retaliation for such employee's disclosure of information to any employee of the contracting state or quasi-public agency or the Auditors of Public Accounts or the Attorney General under the provisions of subsection (a) of such statute, the Contractor shall be liable for a civil penalty of not more than five thousand dollars for each offense, up to a maximum of twenty per cent of the value of this Contract. Each violation shall be a separate and distinct offense and in the case of a continuing violation, each calendar day's continuance of the violation shall be deemed to be a separate and distinct offense. The State may request that the Attorney General bring a civil action in the Superior Court for the Judicial District of Hartford to seek imposition and recovery of such civil penalty. In accordance with subsection (f) of such statute, each large state contractor, as defined in the statute, shall post a notice of the provisions of the statute relating to large state contractors in a conspicuous place which is readily available for viewing by the employees of the Contractor.

#### 12. Connecticut Freedom of Information Act

- (a) Disclosure of Records. This Contract may be subject to the provisions of section 1-218 of the Connecticut General Statutes. In accordance with this statute, each contract in excess of two million five hundred thousand dollars between a public agency and a person for the performance of a governmental function shall (a) provide that the public agency is entitled to receive a copy of records and files related to the performance of the governmental function, and (b) indicate that such records and files are subject to FOIA and may be disclosed by the public agency pursuant to FOIA. No request to inspect or copy such records or files shall be valid unless the request is made to the public agency in accordance with FOIA. Any complaint by a person who is denied the right to inspect or copy such records or files shall be brought to the Freedom of Information Commission in accordance with the provisions of sections 1-205 and 1-206 of the Connecticut General Statutes.
- (b) Confidential Information. The State will afford due regard to the Contractor's request for the protection of proprietary or confidential information which the State receives from the Contractor. However, all materials associated with the Contract are subject to the terms of the FOIA and all corresponding rules, regulations and interpretations. In making such a request, the Contractor may not merely state generally that the materials are proprietary or confidential in nature and not, therefore, subject to release to third parties. Those particular sentences, paragraphs, pages or sections that the Contractor believes are exempt from disclosure under the FOIA must be specifically identified as such. Convincing explanation and rationale sufficient to justify each exemption consistent with the FOIA must accompany the request. The rationale and explanation must be stated in terms of the prospective harm to the competitive position of the Contractor that would result if the identified material were to be released and the reasons why the materials are legally exempt

from release pursuant to the FOIA. To the extent that any other provision or part of the Contract conflicts or is in any way inconsistent with this section, this section controls and shall apply and the conflicting provision or part shall not be given effect. If the Contractor indicates that certain documentation is submitted in confidence, by specifically and clearly marking the documentation as "CONFIDENTIAL," DOT will first review the Contractor's claim for consistency with the FOIA (that is, review that the documentation is actually a trade secret or commercial or financial information and not required by statute), and if determined to be consistent, will endeavor to keep such information confidential to the extent permitted by law. See, e.g., Conn. Gen. Stat. §1-210(b)(5)(A-B). The State, however, has no obligation to initiate, prosecute or defend any legal proceeding or to seek a protective order or other similar relief to prevent disclosure of any information that is sought pursuant to a FOIA request. Should the State withhold such documentation from a Freedom of Information requester and a complaint be brought to the Freedom of Information Commission, the Contractor shall have the burden of cooperating with DOT in defense of that action and in terms of establishing the availability of any FOIA exemption in any proceeding where it is an issue. In no event shall the State have any liability for the disclosure of any documents or information in its possession which the State believes are required to be disclosed pursuant to the FOIA or other law.

#### 13. Service of Process

The Contractor, if not a resident of the State of Connecticut, or, in the case of a partnership, the partners, if not residents, hereby appoints the Secretary of State of the State of Connecticut, and his successors in office, as agent for service of process for any action arising out of or as a result of this Contract; such appointment to be in effect throughout the life of this Contract and six (6) years thereafter.

### 14. Substitution of Securities for Retainages on State Contracts and Subcontracts

This Contract is subject to the provisions of Section 3-ll2a of the General Statutes of the State of Connecticut, as revised.

### 15. Health Insurance Portability and Accountability Act of 1996 (HIPAA)

The Contractor shall comply, if applicable, with the Health Insurance Portability and Accountability Act of 1996 and, pursuant thereto, the provisions attached at Exhibit D, and hereby made part of this Contract.

#### 16. Forum and Choice of Law

Forum and Choice of Law. The parties deem the Contract to have been made in the City of Hartford, State of Connecticut. Both parties agree that it is fair and reasonable for the validity and construction of the Contract to be, and it shall be, governed by the laws and court decisions of the State of Connecticut, without giving effect to its principles of conflicts of laws. To the extent that any immunities provided by Federal law or the laws of the State of Connecticut do not bar an action against the State, and to the extent that these courts are courts of competent jurisdiction, for the purpose of venue, the complaint shall be made returnable to the Judicial District of Hartford only or shall be brought in the United States District Court for the District of Connecticut only, and shall not be transferred to any other court, provided, however, that nothing here constitutes a waiver or compromise of the sovereign immunity of the State of Connecticut. The Contractor waives any objection which it may now have or will have to the laying of venue of any Claims in any forum and further irrevocably submits to such jurisdiction in any suit, action or proceeding.

### 17. Summary of State Ethics Laws

Pursuant to the requirements of section 1-101qq of the Connecticut General Statutes, the summary of State ethics laws developed by the State Ethics Commission pursuant to section 1-81b of the Connecticut General Statutes is incorporated by reference into and made a part of the Contract as if the summary had been fully set forth in the Contract.

## 18. Audit and Inspection of Plants, Places of Business and Records

- (a) The State and its agents, including, but not limited to, the Connecticut Auditors of Public Accounts, Attorney General and State's Attorney and their respective agents, may, at reasonable hours, inspect and examine all of the parts of the Contractor's and Contractor Parties' plants and places of business which, in any way, are related to, or involved in, the performance of this Contract. For the purposes of this Section, "Contractor Parties" means the Contractor's members, directors, officers, shareholders, partners, managers, principal officers, representatives, agents, servants, consultants, employees or any one of them or any other person or entity with whom the Contractor is in privity of oral or written contract and the Contractor intends for such other person or entity to Perform under the Contract in any capacity.
- (b) The Contractor shall maintain, and shall require each of the Contractor Parties to maintain, accurate and complete Records. The Contractor shall make all of its and the Contractor Parties' Records available at all reasonable hours for audit and inspection by the State and its agents.
- (c) The State shall make all requests for any audit or inspection in writing and shall provide the Contractor with at least twenty-four (24) hours' notice prior to the requested audit and inspection date. If the State suspects fraud or other abuse, or in the event of an emergency, the State is not obligated to provide any prior notice.
- (d) The Contractor shall keep and preserve or cause to be kept and preserved all of its and Contractor Parties' Records until three (3) years after the latter of (i) final payment under this Agreement, or (ii) the expiration or earlier termination of this Agreement, as the same may be modified for any reason. The State may request an audit or inspection at any time during this period. If any Claim or audit is started before the expiration of this period, the Contractor shall retain or cause to be retained all Records until all Claims or audit findings have been resolved.
- (e) The Contractor shall cooperate fully with the State and its agents in connection with an audit or inspection. Following any audit or inspection, the State may conduct and the Contractor shall cooperate with an exit conference.
- (f) The Contractor shall incorporate this entire Section verbatim into any contract or other agreement that it enters into with any Contractor Party.

#### 19. Campaign Contribution Restriction

For all State contracts, defined in Conn. Gen. Stat. §9-612(f)(1) as having a value in a calendar year of \$50,000 or more, or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this contract expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice, as set forth in "Notice to Executive Branch State Contractors and Prospective State Contractors of Campaign Contribution and Solicitation Limitations," a copy of which is attached hereto and hereby made a part of this contract, attached as Exhibit E.

## **20.** Tangible Personal Property

(a) The Contractor on its behalf and on behalf of its Affiliates, as defined below, shall comply with the provisions of Conn. Gen. Stat. §12-411b, as follows:

- (1)For the term of the Contract, the Contractor and its Affiliates shall collect and remit to the State of Connecticut, Department of Revenue Services, any Connecticut use tax due under the provisions of Chapter 219 of the Connecticut General Statutes for items of tangible personal property sold by the Contractor or by any of its Affiliates in the same manner as if the Contractor and such Affiliates were engaged in the business of selling tangible personal property for use in Connecticut and had sufficient nexus under the provisions of Chapter 219 to be required to collect Connecticut use tax;
- (2) A customer's payment of a use tax to the Contractor or its Affiliates relieves the customer of liability for the use tax;
- (3) The Contractor and its Affiliates shall remit all use taxes they collect from customers on or before the due date specified in the Contract, which may not be later than the last day of the month next succeeding the end of a calendar quarter or other tax collection period during which the tax was collected;
- (4) The Contractor and its Affiliates are not liable for use tax billed by them but not paid to them by a customer; and
- (5) Any Contractor or Affiliate who fails to remit use taxes collected on behalf of its customers by the due date specified in the Contract shall be subject to the interest and penalties provided for persons required to collect sales tax under chapter 219 of the general statutes.
- (b) For purposes of this section of the Contract, the word "Affiliate" means any person, as defined in section 12-1 of the general statutes, that controls, is controlled by, or is under common control with another person. A person controls another person if the person owns, directly or indirectly, more than ten per cent of the voting securities of the other person. The word "voting security" means a security that confers upon the holder the right to vote for the election of members of the board of directors or similar governing body of the business, or that is convertible into, or entitles the holder to receive, upon its exercise, a security that confers such a right to vote. "Voting security" includes a general partnership interest.
- (c) The Contractor represents and warrants that each of its Affiliates has vested in the Contractor plenary authority to so bind the Affiliates in any agreement with the State of Connecticut. The Contractor on its own behalf and on behalf of its Affiliates shall also provide, no later than 30 days after receiving a request by the State's contracting authority, such information as the State may require to ensure, in the State's sole determination, compliance with the provisions of Chapter 219 of the Connecticut General Statutes, including, but not limited to, §12-411b.

### 21. Bid Rigging and/or Fraud – Notice to Contractor

The Connecticut Department of Transportation is cooperating with the U.S. Department of Transportation and the Justice Department in their investigation into highway construction contract bid rigging and/or fraud.

A toll-free "HOT LINE" telephone number 800-424-9071 has been established to receive information from contractors, subcontractors, manufacturers, suppliers or anyone with knowledge of bid rigging and/or fraud, either past or current. The "HOT LINE" telephone number will be available during normal working hours (8:00 am - 5:00 pm EST). Information will be treated confidentially and anonymity respected.

#### 22. Consulting Agreement Affidavit

The Contractor shall comply with Connecticut General Statutes Section 4a-81(a) and 4a-81(b), as revised. Pursuant to Public Act 11-229, after the initial submission of the form, if there is a change in the information contained in the form, a contractor shall submit the updated form, as applicable, either (i) not later than thirty (30) days after the effective date of such change or (ii) prior to execution of any new contract, whichever is earlier.

The Affidavit/Form may be submitted in written format or electronic format through the Department of Administrative Services (DAS) website.

## 23. Cargo Preference Act Requirements (46 CFR 381.7(a)-(b)) – Use of United States Flag Vessels

The Contractor agrees to comply with the following:

## (a) Agreement Clauses.

- (1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.
- (2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (b) Contractor and Subcontractor Clauses. The contractor agrees—
- (1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

#### **EXHIBIT A**

FHWA-1273 -- Revised May 1, 2012

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

### **ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the

assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
  - b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- **2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- **3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential

minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- **7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- **8.** Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- **9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

## 10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26, and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26, in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
  - a. The records kept by the contractor shall document the following:
  - (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on <a href="Form FHWA-1391">Form FHWA-1391</a>. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

#### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating

areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

#### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

### 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or

any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## 3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

- (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is

registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
  - d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5.** Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- **8.** Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit

any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- **3.** Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

#### VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under

construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

### VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

#### 18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

### 1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered

transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

- 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion First Tier Participants:
- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with

obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

## Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

#### XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency,

a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

# ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
  - a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

#### **EXHIBIT B**

#### TITLE VI CONTRACTOR ASSURANCES

During the performance of this Contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

- 1. **Compliance with Regulations:** The Contractor shall comply with the regulations relative to nondiscrimination in federally assisted programs of the United States Department of Transportation (hereinafter, "USDOT"), Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the "Regulations"), which are herein incorporated by reference and made a part of this contract.
- 2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the Contract, shall not discriminate on the grounds of race, color, national origin, sex, age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Subsection 5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment:
  In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, sex, age, or disability.
- 4. **Information and Reports:** The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Connecticut Department of Transportation (ConnDOT) or the Funding Agency (FHWA, FTA and FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to ConnDOT or the Funding Agency, as appropriate, and shall set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Contract, the ConnDOT shall impose such sanctions as it or the Funding Agency may determine to be appropriate, including, but not limited to:
  - A. Withholding contract payments until the Contractor is in-compliance; and/or
  - B. Cancellation, termination, or suspension of the Contract, in whole or in part.
- 6. **Incorporation of Provisions:** The Contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as the ConnDOT or the Funding Agency may -direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the ConnDOT to enter into such litigation to protect the interests of the Funding Agency, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States

#### **EXHIBIT C**

# CONTRACTOR WORKFORCE UTILIZATION (FEDERAL EXECUTIVE ORDER 11246) / EQUAL EMPLOYMENT OPPORTUNITY (Federal - FHWA)

#### 1. Project Workforce Utilization Goals:

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally assisted or funded) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where the work is actually performed.

Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications which contain the applicable goals for minority and female participation.

The goals for minority and female utilization are expressed in percentage terms for the contractor's aggregate work-force in each trade on all construction work in the covered area, are referenced in the attached Appendix A.

#### 2. Executive Order 11246

The Contractor's compliance with Executive Order 11246 and 41-CFR Part 60-4 shall be based on its implementation of the specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(A) and its efforts to meet the goals established for the geographical area where the contract is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hour performed.

If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors toward a goal in an approved Pan does not excuse any covered Contractor's of subcontractor's failure to take good faith efforts to achieve the plan goals and timetables.

The Contractor shall implement the specific affirmative action standards provided in a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in

which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs (OFCCP) Office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractors obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant hereto.

In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites; and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off the street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason thereafter; along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the Union or Unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or women sent by the Contractor, or when the Contractor has other

information that the Union referral process has impeded the Contractor's efforts to meet its obligations.

- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO Policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company EEO Policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment, decisions including specific Foreman, etc. prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO Policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work-force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- 1. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and

employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

- n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review at least annually of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (a through p). The efforts of a contractor association, joint contractor union, contractor community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under a through p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work-force participation, makes a good faith effort to meet with individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of Executive Order 11246 if a particular group is employed in a substantially disparate manner, (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under utilized).

The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in these

specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4 8.

The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status, (e.g. mechanic, apprentice, trainee, helper, or laborer) dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

Nothing herein provided shall be construed as a limitation upon the application of their laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

The Director of the Office of Federal Contract Compliance Programs, from time to time, shall issue goals and timetables for minority and female utilization which shall be based on appropriate workforce, demographic or other relevant data and which shall cover construction projects or construction contracts performed in specific geographical areas. The goals, which shall be applicable to each construction trade in a covered contractor's or timetables, shall be published as notices in the Federal Register, and shall be inserted by the Contracting officers and applicants, as applicable, in the Notice required by 41 CFR 60-4.2.

# FEDERALLY FUNDED OR ASSISTED PROJECTS APPENDIX A (Labor Market Goals)

### Standard Metropolitan Statistical Area (SMSA)

<b>Female</b>			<u>Mi</u>	<u>nority</u>	
Bridgeport – Star 6.9%	mford – Norwalk – Da	nbury		10.2%	
Bethel	Bridgeport	Brookfield	Danbury		
Darien	Derby	Easton	Fairfield		
Greenwich	Milford	Monroe	New Canaan		
New Fairfield	Newton	Norwalk	Redding		
Shelton	Stamford	Stratford	Trumbull		
Weston	Westport	Wilton			
Hartford – Bristo	ol – New Britain			6.9%	
Andover	Avon	Berlin	Bloomfield		
Bolton	Bristol	Burlington	Canton		
Colchester	Columbia	Coventry	Cromwell		
East Granby	East Hampton	East Hartford	East Windsor		
Ellington	Enfield	Farmington	Glastonbury		
Granby	Hartford	Hebron	Manchester		
Marlborough	New Britain	New Hartford	Newington		
Plainville	Plymouth	Portland	Rocky Hill		
Simsbury	South Windsor	Southington	Stafford		
Suffield	Tolland	Vernon	West Hartford		
Wethersfield	Willington	Windsor	Windsor Locks		
New Haven – Wa	nterbury – Meriden			9.0%	
Beacon Falls	Bethany	Branford	Cheshire		
Clinton	East Haven	Guilford	Hamden		
Madison	Meriden	Middlebury	Naugatuck		
New Haven	North Branford	North Haven	Orange		
Prospect	Southbury	Thomaston	Wallingford		
Waterbury	Watertown	West Haven	Wolcott		
Woodbridge	Woodbury				
New London – N	orwich			4.5%	
6.9%	V2 11 4V44			1.0 / 0	
Bozrah	East Lyme	Griswold	Groton		
Ledyard	Lisbon	Montville	New London		
Norwich	Old Lyme	Old Saybrook	Preston		
Sprague	Stonington	Waterford			

## Non SMSA

## <u>Female</u> <u>Minority</u>

Litchfield – Windh 6.9%	am		5.9%
Abington	Ashford	Ballouville	Bantam
Barkhamsted	Bethlehem	Bridgewater	Brooklyn
Canaan	Canterbury	Central Village	Cahplin
Colebrook	Cornwall	Cornwall Bridge	Danielson
Dayville	East Canaan	East Killingly	East Woodstock
Eastford	Falls Village	Gaylordsville	Goshen
Grosvenor Dale	Hampton	Harwinton	Kent
Killignly	Lakeside	Litchfield	Moosup
Morris	New Milford	New Preston	New Preston Marble Dale
Norfolk	North Canaan	No. Grosvenordale	North Windham
Oneco	Pequabuck	Pine Meadow	Plainfield
Pleasant Valley	Pomfret	Pomfret Center	Putnam
Quinebaug	Riverton	Rogers	Roxbury
Salisbury	Scotland	Sharon	South Kent
South Woodstock	Sterling	Taconic	Terryville
Thompson	Torrington	Warren	Warrenville
Washington	Washington Depot	Wauregan	West Cornwall
Willimantic	Winchester	Winchester Center	Windham
Winsted	Woodstock	Woodstock Valley	

#### **EXHIBIT D**

#### Health Insurance Portability and Accountability Act of 1996 ("HIPAA").

- (a) If the Contactor is a Business Associate under the requirements of the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), the Contractor must comply with all terms and conditions of this Section of the Contract. If the Contractor is not a Business Associate under HIPAA, this Section of the Contract does not apply to the Contractor for this Contract.
- (b) The Contractor is required to safeguard the use, publication and disclosure of information on all applicants for, and all clients who receive, services under the Contract in accordance with all applicable federal and state law regarding confidentiality, which includes but is not limited to HIPAA, more specifically with the Privacy and Security Rules at 45 C.F.R. Part 160 and Part 164, subparts A, C, and E; and
- (c) The State of Connecticut Agency named on page 1 of this Contract (hereinafter the "Department") is a "covered entity" as that term is defined in 45 C.F.R. § 160.103; and
- (d) The Contractor, on behalf of the Department, performs functions that involve the use or disclosure of "individually identifiable health information," as that term is defined in 45 C.F.R. § 160.103; and
- (e) The Contractor is a "business associate" of the Department, as that term is defined in 45 C.F.R. § 160.103; and
- (f) The Contractor and the Department agree to the following in order to secure compliance with the HIPAA, the requirements of Subtitle D of the Health Information Technology for Economic and Clinical Health Act (hereinafter the HITECH Act), (Pub. L. 111-5, sections 13400 to 13423), and more specifically with the Privacy and Security Rules at 45 C.F.R. Part 160 and Part 164, subparts A, C, and E.

#### (g) Definitions

- (1) "Breach shall have the same meaning as the term is defined in section 13400 of the HITECH Act (42 U.S.C. §17921(1))
- (2) "Business Associate" shall mean the Contractor.
- (3) "Covered Entity" shall mean the Department of the State of Connecticut named on page 1 of this Contract.
- (4) "Designated Record Set" shall have the same meaning as the term "designated record set" in 45 C.F.R. § 164.501.
- (5) "Electronic Health Record" shall have the same meaning as the term is defined in section 13400 of the HITECH Act (42 U.S.C. §17921(5))

- (6) "Individual" shall have the same meaning as the term "individual" in 45 C.F.R. § 160.103 and shall include a person who qualifies as a personal representative as defined in 45 C.F.R. § 164.502(g).
- (7) "Privacy Rule" shall mean the Standards for Privacy of Individually Identifiable Health Information at 45 C.F.R. part 160 and parts 164, subparts A and E.
- (8) "Protected Health Information" or "PHI" shall have the same meaning as the term "protected health information" in 45 C.F.R. § 160.103, limited to information created or received by the Business Associate from or on behalf of the Covered Entity.
- (9) "Required by Law" shall have the same meaning as the term "required by law" in 45 C.F.R. § 164.103.
- (10) "Secretary" shall mean the Secretary of the Department of Health and Human Services or his designee.
- (11) "More stringent" shall have the same meaning as the term "more stringent" in 45 C.F.R. § 160.202.
- (12) "This Section of the Contract" refers to the HIPAA Provisions stated herein, in their entirety.
- (13) "Security Incident" shall have the same meaning as the term "security incident" in 45 C.F.R.§ 164.304.
- (14) "Security Rule" shall mean the Security Standards for the Protection of Electronic Protected Health Information at 45 C.F.R. part 160 and parts 164, subpart A and C.
- (15) "Unsecured protected health information" shall have the same meaning as the term as defined in section 13402(h)(1)(A) of HITECH. Act. (42 U.S.C. §17932(h)(1)(A)).
- (h) Obligations and Activities of Business Associates.
  - (1) Business Associate agrees not to use or disclose PHI other than as permitted or required by this Section of the Contract or as Required by Law.
  - (2) Business Associate agrees to use appropriate safeguards to prevent use or disclosure of PHI other than as provided for in this Section of the Contract.
  - (3) Business Associate agrees to use administrative, physical and technical safeguards that reasonably and appropriately protect the confidentiality, integrity, and availability of electronic protected health information that it creates, receives, maintains, or transmits on behalf of the Covered Entity.
  - (4) Business Associate agrees to mitigate, to the extent practicable, any harmful effect that is known to the Business Associate of a use or disclosure of PHI by Business Associate in violation of this Section of the Contract.

- (5) Business Associate agrees to report to Covered Entity any use or disclosure of PHI not provided for by this Section of the Contract or any security incident of which it becomes aware.
- (6) Business Associate agrees to insure that any agent, including a subcontractor, to whom it provides PHI received from, or created or received by Business Associate, on behalf of the Covered Entity, agrees to the same restrictions and conditions that apply through this Section of the Contract to Business Associate with respect to such information.
- (7) Business Associate agrees to provide access, at the request of the Covered Entity, and in the time and manner agreed to by the parties, to PHI in a Designated Record Set, to Covered Entity or, as directed by Covered Entity, to an Individual in order to meet the requirements under 45 C.F.R. § 164.524.
- (8) Business Associate agrees to make any amendments to PHI in a Designated Record Set that the Covered Entity directs or agrees to pursuant to 45 C.F.R. § 164.526 at the request of the Covered Entity, and in the time and manner agreed to by the parties.
- (9) Business Associate agrees to make internal practices, books, and records, including policies and procedures and PHI, relating to the use and disclosure of PHI received from, or created or received by, Business Associate on behalf of Covered Entity, available to Covered Entity or to the Secretary in a time and manner agreed to by the parties or designated by the Secretary, for purposes of the Secretary determining Covered Entity's compliance with the Privacy Rule.
- (10)Business Associate agrees to document such disclosures of PHI and information related to such disclosures as would be required for Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 C.F.R. § 164.528 and section 13405 of the HITECH Act (42 U.S.C. § 17935) and any regulations promulgated thereunder.
- (11)Business Associate agrees to provide to Covered Entity, in a time and manner agreed to by the parties, information collected in accordance with clause h. (10) of this Section of the Contract, to permit Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 C.F.R. § 164.528 and section 13405 of the HITECH Act (42 U.S.C. § 17935) and any regulations promulgated thereunder. Business Associate agrees at the Covered Entity's direction to provide an accounting of disclosures of PHI directly to an individual in accordance with 45 C.F.R. § 164.528 and section 13405 of the HITECH Act (42 U.S.C. § 17935) and any regulations promulgated thereunder.
- (12)Business Associate agrees to comply with any state or federal law that is more stringent than the Privacy Rule.
- (13) Business Associate agrees to comply with the requirements of the HITECH Act relating to privacy and security that are applicable to the Covered Entity and with the requirements of 45 C.F.R. sections 164.504(e), 164.308, 164.310, 164.312, and 164.316.

- (14) In the event that an individual requests that the Business Associate (a) restrict disclosures of PHI; (b) provide an accounting of disclosures of the individual's PHI; or (c) provide a copy of the individual's PHI in an electronic health record, the Business Associate agrees to notify the covered entity, in writing, within two business days of the request.
- (15) Business Associate agrees that it shall not, directly or indirectly, receive any remuneration in exchange for PHI of an individual without (1) the written approval of the covered entity, unless receipt of remuneration in exchange for PHI is expressly authorized by this Contract and (2) the valid authorization of the individual, except for the purposes provided under section 13405(d)(2) of the HITECH Act,(42 U.S.C. § 17935(d)(2)) and in any accompanying regulations

#### (16) Obligations in the Event of a Breach

- A. The Business Associate agrees that, following the discovery of a breach of unsecured protected health information, it shall notify the Covered Entity of such breach in accordance with the requirements of section 13402 of HITECH (42 U.S.C. 17932(b) and the provisions of this Section of the Contract.
- B. Such notification shall be provided by the Business Associate to the Covered Entity without unreasonable delay, and in no case later than 30 days after the breach is discovered by the Business Associate, except as otherwise instructed in writing by a law enforcement official pursuant to section 13402 (g) of HITECH (42 U.S.C. 17932(g)). A breach is considered discovered as of the first day on which it is, or reasonably should have been, known to the Business Associate. The notification shall include the identification and last known address, phone number and email address of each individual (or the next of kin of the individual if the individual is deceased) whose unsecured protected health information has been, or is reasonably believed by the Business Associate to have been, accessed, acquired, or disclosed during such breach.
- C. The Business Associate agrees to include in the notification to the Covered Entity at least the following information:
  - 1. A brief description of what happened, including the date of the breach and the date of the discovery of the breach, if known.
  - 2. A description of the types of unsecured protected health information that were involved in the breach (such as full name, Social Security number, date of birth, home address, account number, or disability code).
  - 3. The steps the Business Associate recommends that individuals take to protect themselves from potential harm resulting from the breach.
  - 4. A detailed description of what the Business Associate is doing to investigate the breach, to mitigate losses, and to protect against any further breaches.
  - 5. Whether a law enforcement official has advised either verbally or in writing the Business Associate that he or she has determined that notification or notice to

individuals or the posting required under section 13402 of the HITECH Act would impede a criminal investigation or cause damage to national security and; if so, include contact information for said official.

- D. Business Associate agrees to provide appropriate staffing and have established procedures to ensure that individuals informed by the Covered Entity of a breach by the Business Associate have the opportunity to ask questions and contact the Business Associate for additional information regarding the breach. Such procedures shall include a toll-free telephone number, an e-mail address, a posting on its Web site and a postal address. Business Associate agrees to include in the notification of a breach by the Business Associate to the Covered Entity, a written description of the procedures that have been established to meet these requirements. Costs of such contact procedures will be borne by the Contractor.
- E. Business Associate agrees that, in the event of a breach, it has the burden to demonstrate that it has complied with all notifications requirements set forth above, including evidence demonstrating the necessity of a delay in notification to the Covered Entity.
- (i) Permitted Uses and Disclosure by Business Associate.
  - (1) General Use and Disclosure Provisions Except as otherwise limited in this Section of the Contract, Business Associate may use or disclose PHI to perform functions, activities, or services for, or on behalf of, Covered Entity as specified in this Contract, provided that such use or disclosure would not violate the Privacy Rule if done by Covered Entity or the minimum necessary policies and procedures of the Covered Entity.
  - (2) Specific Use and Disclosure Provisions
    - (A) Except as otherwise limited in this Section of the Contract, Business Associate may use PHI for the proper management and administration of Business Associate or to carry out the legal responsibilities of Business Associate.
    - (B) Except as otherwise limited in this Section of the Contract, Business Associate may disclose PHI for the proper management and administration of Business Associate, provided that disclosures are Required by Law, or Business Associate obtains reasonable assurances from the person to whom the information is disclosed that it will remain confidential and used or further disclosed only as Required by Law or for the purpose for which it was disclosed to the person, and the person notifies Business Associate of any instances of which it is aware in which the confidentiality of the information has been breached.
    - (C) Except as otherwise limited in this Section of the Contract, Business Associate may use PHI to provide Data Aggregation services to Covered Entity as permitted by 45 C.F.R. § 164.504(e)(2)(i)(B).
- (j) Obligations of Covered Entity.

- (1) Covered Entity shall notify Business Associate of any limitations in its notice of privacy practices of Covered Entity, in accordance with 45 C.F.R. § 164.520, or to the extent that such limitation may affect Business Associate's use or disclosure of PHI.
- (2) Covered Entity shall notify Business Associate of any changes in, or revocation of, permission by Individual to use or disclose PHI, to the extent that such changes may affect Business Associate's use or disclosure of PHI.
- (3) Covered Entity shall notify Business Associate of any restriction to the use or disclosure of PHI that Covered Entity has agreed to in accordance with 45 C.F.R. § 164.522, to the extent that such restriction may affect Business Associate's use or disclosure of PHI.
- (k) Permissible Requests by Covered Entity. Covered Entity shall not request Business Associate to use or disclose PHI in any manner that would not be permissible under the Privacy Rule if done by the Covered Entity, except that Business Associate may use and disclose PHI for data aggregation, and management and administrative activities of Business Associate, as permitted under this Section of the Contract.
- (1) Term and Termination.
  - (1) Term. The Term of this Section of the Contract shall be effective as of the date the Contract is effective and shall terminate when the information collected in accordance with clause h. (10) of this Section of the Contract is provided to the Covered Entity and all of the PHI provided by Covered Entity to Business Associate, or created or received by Business Associate on behalf of Covered Entity, is destroyed or returned to Covered Entity, or, if it is infeasible to return or destroy PHI, protections are extended to such information, in accordance with the termination provisions in this Section.
  - (2) Termination for Cause Upon Covered Entity's knowledge of a material breach by Business Associate, Covered Entity shall either:
    - (A) Provide an opportunity for Business Associate to cure the breach or end the violation and terminate the Contract if Business Associate does not cure the breach or end the violation within the time specified by the Covered Entity; or
    - (B) Immediately terminate the Contract if Business Associate has breached a material term of this Section of the Contract and cure is not possible; or
    - (C) If neither termination nor cure is feasible, Covered Entity shall report the violation to the Secretary.

#### (3) Effect of Termination

(A) Except as provided in (l)(2) of this Section of the Contract, upon termination of this Contract, for any reason, Business Associate shall return or destroy all PHI received from Covered Entity, or created or received by Business Associate on behalf of Covered Entity. Business Associate shall also provide the information collected in accordance with clause h. (10) of this Section of the Contract to the Covered Entity

within ten business days of the notice of termination. This provision shall apply to PHI that is in the possession of subcontractors or agents of Business Associate. Business Associate shall retain no copies of the PHI.

- (B) In the event that Business Associate determines that returning or destroying the PHI is infeasible, Business Associate shall provide to Covered Entity notification of the conditions that make return or destruction infeasible. Upon documentation by Business Associate that return or destruction of PHI is infeasible, Business Associate shall extend the protections of this Section of the Contract to such PHI and limit further uses and disclosures of PHI to those purposes that make return or destruction infeasible, for as long as Business Associate maintains such PHI. Infeasibility of the return or destruction of PHI includes, but is not limited to, requirements under state or federal law that the Business Associate maintains or preserves the PHI or copies thereof.
- (m) Miscellaneous Provisions.
  - (1) Regulatory References. A reference in this Section of the Contract to a section in the Privacy Rule means the section as in effect or as amended.
  - (2) Amendment. The Parties agree to take such action as in necessary to amend this Section of the Contract from time to time as is necessary for Covered Entity to comply with requirements of the Privacy Rule and the Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191.
  - (3) Survival. The respective rights and obligations of Business Associate shall survive the termination of this Contract.
  - (4) Effect on Contract. Except as specifically required to implement the purposes of this Section of the Contract, all other terms of the Contract shall remain in force and effect.
  - (5) Construction. This Section of the Contract shall be construed as broadly as necessary to implement and comply with the Privacy Standard. Any ambiguity in this Section of the Contract shall be resolved in favor of a meaning that complies, and is consistent with, the Privacy Standard.
  - (6) Disclaimer. Covered Entity makes no warranty or representation that compliance with this Section of the Contract will be adequate or satisfactory for Business Associate's own purposes. Covered Entity shall not be liable to Business Associate for any claim, civil or criminal penalty, loss or damage related to or arising from the unauthorized use or disclosure of PHI by Business Associate or any of its officers, directors, employees, contractors or agents, or any third party to whom Business Associate has disclosed PHI contrary to the provisions of this Contract or applicable law. Business Associate is solely responsible for all decisions made, and actions taken, by Business Associate regarding the safeguarding, use and disclosure of PHI within its possession, custody or control.
- (7) Indemnification. The Business Associate shall indemnify and hold the Covered Entity harmless from and against any and all claims, liabilities, judgments, fines, assessments, penalties, awards and any statutory damages that may be imposed or assessed pursuant to HIPAA, as amended or the

HITECH Act, including, without limitation, attorney's fees, expert witness fees, costs of investigation, litigation or dispute resolution, and costs awarded thereunder, relating to or arising out of any violation by the Business Associate and its agents, including subcontractors, of any obligation of Business Associate and its agents, including subcontractors, under this section of the contract, under HIPAA, the HITECH Act, the Privacy Rule and the Security Rule.

Rev. 1/11 Page 1 of 2

## **Notice to Executive Branch State Contractors and Prospective State Contractors of Campaign Contribution and Solicitation Limitations**

This notice is provided under the authority of Connecticut General Statutes §9-612(g)(2), as amended by P.A. 10-1, and is for the purpose of informing state contractors and prospective state contractors of the following law (italicized words are defined on the reverse side of this page).

#### CAMPAIGN CONTRIBUTION AND SOLICITATION LIMITATIONS

No state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee (which includes town committees).

In addition, no holder or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of State senator or State representative, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

On and after January 1, 2011, no state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall **knowingly** *solicit* contributions from the state contractor's or prospective state contractor's employees or from a *subcontractor* or *principals* of the *subcontractor* on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

#### **DUTY TO INFORM**

State contractors and prospective state contractors are required to inform their principals of the above prohibitions, as applicable, and the possible penalties and other consequences of any violation thereof.

#### PENALTIES FOR VIOLATIONS

Contributions or solicitations of contributions made in violation of the above prohibitions may result in the following civil and criminal penalties:

**Civil penalties**—Up to \$2,000 or twice the amount of the prohibited contribution, whichever is greater, against a principal or a contractor. Any state contractor or prospective state contractor which fails to make reasonable efforts to comply with the provisions requiring notice to its principals of these prohibitions and the possible consequences of their violations may also be subject to civil penalties of up to \$2,000 or twice the amount of the prohibited contributions made by their principals.

**Criminal penalties**—Any knowing and willful violation of the prohibition is a Class D felony, which may subject the violator to imprisonment of not more than 5 years, or not more than \$5,000 in fines, or both.

#### **CONTRACT CONSEQUENCES**

In the case of a state contractor, contributions made or solicited in violation of the above prohibitions may resulting the contract being voided.

In the case of a prospective state contractor, contributions made or solicited in violation of the above prohibitions shall result in the contract described in the state contract solicitation not being awarded to the prospective state contractor, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

The State shall not award any other state contract to anyone found in violation of the above prohibitions for a period of one year after the election for which such contribution is made or solicited, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

Additional information may be found on the website of the State Elections Enforcement Commission, www.ct.gov/seec. Click on the link to "Lobbyist/Contractor Limitations."

#### **DEFINITIONS**

"State contractor" means a person, business entity or nonprofit organization that enters into a state contract. Such person, business entity or nonprofit organization shall be deemed to be a state contractor until December thirty-first of the year in which such contract terminates. "State contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Prospective state contractor" means a person, business entity or nonprofit organization that (i) submits a response to a state contract solicitation by the state, a state agency or a quasi-public agency, or a proposal in response to a request for proposals by the state, a state agency or a quasi-public agency, until the contract has been entered into, or (ii) holds a valid prequalification certificate issued by the Commissioner of Administrative Services under section 4a-100. "Prospective state contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a state contractor or prospective state contractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a state contractor or prospective state contractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a state contractor or prospective state contractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a state contractor or prospective state contractor, which is not a business entity, or if a state contractor or prospective state contractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any state contractor or prospective state contractor who has *managerial or discretionary responsibilities with respect to a state contract*, (v) the spouse or a *dependent child* who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the state contractor or prospective state contractor.

"State contract" means an agreement or contract with the state or any state agency or any quasi-public agency, let through a procurement process or otherwise, having a value of fifty thousand dollars or more, or a combination or series of such agreements or contracts having a value of one hundred thousand dollars or more in a calendar year, for (i) the rendition of services, (ii) the furnishing of any goods, material, supplies, equipment or any items of any kind, (iii) the construction, alteration or repair of any public building or public work, (iv) the acquisition, sale or lease of any land or building, (v) a licensing arrangement, or (vi) a grant, loan or loan guarantee. "State contract" does not include any agreement or contract with the state, any state agency or any quasi-public agency that is exclusively federally funded, an education loan, a loan to an individual for other than commercial purposes or any agreement or contract between the state or any state agency and the United States Department of the Navy or the United States Department of Defense.

"State contract solicitation" means a request by a state agency or quasi-public agency, in whatever form issued, including, but not limited to, an invitation to bid, request for proposals, request for information or request for quotes, inviting bids, quotes or other types of submittals, through a competitive procurement process or another process authorized by law waiving competitive procurement.

"Managerial or discretionary responsibilities with respect to a state contract" means having direct, extensive and substantive responsibilities with respect to the negotiation of the state contract and not peripheral, clerical or ministerial responsibilities.

"Dependent child" means a child residing in an individual's household who may legally be claimed as a dependent on the federal income tax of such individual.

"Solicit" means (A) requesting that a contribution be made, (B) participating in any fund-raising activities for a candidate committee, exploratory committee, political committee or party committee, including, but not limited to, forwarding tickets to potential contributors, receiving contributions for transmission to any such committee or bundling contributions, (C) serving as chairperson, treasurer or deputy treasurer of any such committee, or (D) establishing a political committee for the sole purpose of soliciting or receiving contributions for any committee. Solicit does not include: (i) making a contribution that is otherwise permitted by Chapter 155 of the Connecticut General Statutes; (ii) informing any person of a position taken by a candidate for public office or a public official, (iii) notifying the person of any activities of, or contact information for, any candidate for public office; or (iv) serving as a member in any party committee or as an officer of such committee that is not otherwise prohibited in this section.

"Subcontractor" means any person, business entity or nonprofit organization that contracts to perform part or all of the obligations of a state contractor's state contract. Such person, business entity or nonprofit organization shall be deemed to be a subcontractor until December thirty first of the year in which the subcontract terminates. "Subcontractor" does not include (i) a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or (ii) an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a subcontractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a subcontractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a subcontractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a subcontractor, which is not a business entity, or if a subcontractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any subcontractor who has managerial or discretionary responsibilities with respect to a subcontract with a state contractor, (v) the spouse or a dependent child who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the subcontractor.

### **EXHIBIT F**

(federal wage rate package will be inserted here for final executed contract only. Refer to NTC - Federal Wage Determinations )

General Decision Number: CT160003 07/01/2016 CT3

Superseded General Decision Number: CT20150003

State: Connecticut

Construction Type: Highway

County: Hartford County in Connecticut.

#### HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016
1	01/15/2016
2	04/08/2016
3	04/29/2016
4	05/13/2016
5	06/17/2016
6	07/01/2016

BRCT0001-003 01/04/2016

BRICKLAYER	
BRICKLAYERS, CEMENT	
MASONS, CEMENT FINISHERS,	
PLASTERERS, STONE MASONS\$ 33.48	28.76

Rates

Fringes

CARP0024-005 05/02/2016		
	Rates	Fringes
Carpenters: (Berlin, Bristol, Burlington, Canton, Marlborough, New Britain, Newington, Plainville, Southington)  CARPENTERS; PILEDRIVERS.  DIVER TENDERS	\$ 32.00	24.42 24.42 24.42 24.84

CARP0043-003 05/02/2016

	Rates	Fringes
Carpenters: (Avon, Bloomfied, East Granby, East Hartford, East Windsor, Enfield, Farmington, Glastonbury, Granby, Hartford, hartland, Manchester, Rocky Hill, Simsbury, South Windsor, Suffield, West Hartford, Wethersfield, Windsor, Windsor Locks)  CARPENTERS; PILEDRIVERS		24.42
DIVER TENDERS DIVERS MILLWRIGHTS	.\$ 40.46	24.42 24.42 24.84
ELEC0035-002 06/01/2016		
	Rates	Fringes
Electricians: Entire County, excluding Berlin, Bristol, Hartland, New Britain, Newington,		
Plainville and Southington.	.\$ 38.65	3%+24.42 
ELEC0090-001 06/01/2016		
	Rates	Fringes
Electricians: Berlin, Bristol, New Britain, Newington, Plainville, Southington	.\$ 37.50	3%+25.06
ELEC0488-004 06/01/2016		
	Rates	Fringes
Electricians:	.\$ 38.02	3%+23.75
ENGI0478-002 04/03/2016		
	Rates	Fringes
Power equipment operators:  GROUP 1	.\$ 38.23 .\$ 37.49 .\$ 37.10 .\$ 36.51 .\$ 36.20 .\$ 35.86 .\$ 35.46 .\$ 35.03 .\$ 32.99 .\$ 32.99	23.55 23.55 23.55 23.55 23.55 23.55 23.55 23.55 23.55 23.55 23.55 23.55

GROUP	13\$	33.46	23.55
GROUP	14\$	32.35	23.55
GROUP	15\$	32.04	23.55
GROUP	16\$	31.21	23.55
GROUP	17\$	30.80	23.55
GROUP	18\$	30.15	23.55

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 Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$3.00 premium in addition to the hourly wage rate and benefit contributions:

- 1) Crane handling or erecting structural steel or stone, hoisting engineer(2 drums or over)
- 2) Cranes(100 ton rated capacity and over) Bauer Drill/Caisson
- 3) Cranes(under 100 ton rated capacity)
  - 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.

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS

- GROUP 1: Crane Handling or Erecting Structural Steel or tone; Hoisting Engineer (2 drums or over); Front End Loader (7 cubic yards or over) Work Boat 26 ft. & over.
- GROUP 2: Cranes (100 ton rated capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson
- 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.)
- GROUP 4: Trenching machines; Lighter Derrick; Concrete Finishing Machine, cmi Machine or Similar; Koehring Loader Skooper).
- GROUP 5: Specialty Railroad Equipment; Asphalt Spreader; Asphalt Reclaiming achine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24 Mandrell); Side Boom; Combination Hoe and Loader; Directional Driller.

GROUP 6: Front End Loader (3 cu. yds. up to 7 cubic yards); Bulldozer (Rough grade dozer).

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).

GROUP 8: Mechanic; Grease Truck Operator; Hydroblaster; Barrier Mover; Power Stone Spreader; Welder; Work Boat Under 26 ft.; Transfer Machine.

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).

GROUP 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.

GROUP 11: Conveyor; Earth Roller; Power Pavement Breaker (Whiphammer); Robot Demolition Equipment.

GROUP 12: Wellpoint Operator.

GROUP 13: Portable Asphalt Plant Operator; Portable Concrete Plant Operator; Portable Crusher Plant Operator.

GROUP 14: Compressor Battery Operator.

GROUP 15: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (Minimum for any job requiring a CDL License)

GROUP 16: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).

GROUP 17: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater operator.

GROUP 18: Maintenance Engineer.

\_\_\_\_\_\_

Rates Fringes

Rates Fringes

#### \* IRON0015-002 06/27/2016

Ironworkers: (Reinforcing,
Structural and Precast
Concrete Erection)......\$ 35.22 31.99

a. PAID HOLIDAY: Labor Day provided employee has been on the payroll for the 5 consecutive work days prior to Labor Day.

\_\_\_\_\_

LABO0056-003 04/03/2016

Laborers:			
GROUP	1\$	28.55	18.90
GROUP	2\$	28.80	18.90

GROUP	3\$	29.05	18.90
GROUP	4\$	29.55	18.90
GROUP	5\$	30.30	18.90
GROUP	6\$	30.55	18.90
GROUP	7\$	16.00	18.90

#### LABORERS CLASSIFICATIONS

GROUP 1: Laborers (Unskilled), acetylene burner, concrete specialist

GROUP 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators and powdermen.

GROUP 3: Pipelayers, Jackhammer/Pavement breaker (handheld), mason

tenders/catch basin builders, asphalt rakers, air track operators, block paver and curb setter

GROUP 4: Asbestos/lead removal

GROUP 5: Blasters

GROUP 6: Toxic waste remover

GROUP 7: Traffic control signalman

\_\_\_\_\_\_

#### LABO0056-004 04/03/2016

	Rates	Fringes
Laborers: (TUNNEL		
CONSTRUCTION)		
CLEANING, CONCRETE AND		
CAULKING TUNNEL:		
Concrete Workers, Form		
Movers and Strippers\$	31.28	18.90
Form Erectors	31.60	18.90
ROCK SHAFT, CONCRETE,		
LINING OF SAME AND TUNNEL		
IN FREE AIR:		
Brakemen, Trackmen,		
Tunnel Laborers, Shaft		
Laborers	31.28	18.90
Laborers Topside, Cage		
Tenders, Bellman		18.90
Miners\$	32.22	18.90
SHIELD DRIVE AND LINER		
PLATE TUNNELS IN FREE AIR:		10.00
Brakemen and Trackmen\$	31.28	18.90
Miners, Motormen, Mucking		
Machine Operators,		
Nozzlemen, Grout Men,		
Shaft and Tunnel, Steel		
and Rodmen, Shield and Erector, Arm Operator,		
Cable Tenders\$	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	18.90
TUNNELS, CAISSON AND	, ,,,,,,	10.90
CYLINDER WORK IN		
CITIINDER MORE IN		

COMPRESSED AIR:		
Blaster\$	38.53	18.90
Brakemen, Trackmen,		
Groutman, Laborers,		
Outside Lock Tender,		
Gauge Tenders\$	38.34	18.90
Change House Attendants,		
Powder Watchmen, Top on		
Iron Bolts\$	36.41	18.90
Mucking Machine Operator\$	39.11	18.90

a. PAID HOLIDAYS: On tunnel work only: 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 work day preceding the holiday or the regular work day following the holiday.

1		-
PAIN0011-003 06/01/201		
	Rates	Fringes
Painters: (BRIDGE CONSTRUCTION) Brush, Roller, Bla	sting	
(Sand, Water, etc.	) Spray\$ 46.95	20.15
PAIN0011-004 06/01/201	6	
	Rates	Fringes
Painters:		
Blast and Spray		20.15
Brush and Roll		20.15
Tanks, Towers, Swi	ng\$ 34.02	20.15 

TEAM0064-005 04/03/2016

F	Rates	Fringes
Truck drivers:		
2 Axle Ready Mix\$	28.93	21.39
2 Axle\$	28.83	21.39
3 Axle Ready Mix\$	28.98	21.39
3 Axle\$	28.93	21.39
4 Axle Ready Mix\$	29.08	21.39
4 Axle\$	29.03	21.39
Heavy Duty Trailer 40 tons		
and over\$	29.28	21.39
Heavy Duty Trailer up to		
40 tons\$	29.03	21.39
Specialized (Earth moving		
equipment other than		
conventional type on-the-		
road trucks and semi-		
trailers, including		
Euclids)\$	29.08	21.39

Hazardous waste removal work receives additional \$1.25 per hour.

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.

\_\_\_\_\_\_

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

\_\_\_\_\_\_

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 clauses (29CFR 5.5 (a) (1) (ii)).

-----

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average

rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

\_\_\_\_\_

#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

\_\_\_\_\_\_

END OF GENERAL DECISION

### **EXHIBIT G**

(state wages will be inserted here)

Project: Reconstruction Of Hart Street

## **Minimum Rates and Classifications for Heavy/Highway Construction**

*ID#*: **H** 22815

## **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: 3879 Project Town: New Britain

FAP Number: State Number:

Project: Reconstruction Of Hart Street

CLASSIFICATION	<b>Hourly Rate</b>	Benefits
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 5 and 7**		
1) Boilermaker	33.79	34% + 8.96
	22.40	20.76
1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	33.48	28.76
2) Carpenters, Piledrivermen	32.00	24.42

Project: Reconstruction Of Hart Street		
2a) Diver Tenders	32.00	24.42
3) Divers	40.46	24.42
03a) Millwrights	32.47	24.84
4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water, etc.), Spray	46.95	20.15
4a) Painters: Brush and Roller	32.02	20.15
4b) Painters: Spray Only	35.02	20.15
4c) Painters: Steel Only	34.02	20.15

Project: Reconstruction Of Hart Street		
4d) Painters: Blast and Spray	35.02	20.15
4e) Painters: Tanks, Tower and Swing	34.02	20.15
5) Electricion (Trada License required, E.1.2 L.5.6 C.5.6 T.1.2 L.1.2 V	27.50	25.06+20/ of
5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	37.50	25.06+3% of gross wage
6) Ironworkers: Ornamental, Reinforcing, Structural, and Precast Concrete Erection	35.22	31.99 + 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)	40.62	29.71
LABORERS		
8) Group 1: Laborer (Unskilled), Common or General, acetylene burner, concrete specialist	28.55	18.90

Project: Reconstruction Of Hart Street		
9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen	28.80	18.90
10) Group 3: Pipelayers	29.05	18.90
11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators, block paver, curb setter and forklift operators	29.05	18.90
12) Group 5: Toxic waste removal (non-mechanical systems)	30.55	18.90
13) Group 6: Blasters	30.30	18.90
Group 7: Asbestos/lead removal, non-mechanical systems (does not include leaded joint pipe)	29.55	18.90
Group 8: Traffic control signalmen	16.00	18.90

Group 9: Hydraulic Drills	29.30	18.90
LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and Liner Plate Tunnels in Free Air		
3a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Γenders	32.22	18.90 + a
13b) Brakemen, Trackmen	31.28	18.90 + a
CLEANING, CONCRETE AND CAULKING TUNNEL		
14) Concrete Workers, Form Movers, and Strippers	31.28	18.90 + a
15) Form Erectors	31.60	18.90 + a

Project: Reconstruction Of Hart Street

Project: Reconstruction Of Hart Street ----ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL IN FREE AIR:----16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers 31.28 18.90 + a17) Laborers Topside, Cage Tenders, Bellman 31.17 18.90 + a32.22 18) Miners 18.90 + a----TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR: ----18a) Blaster 38.53 18.90 + a19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge 38.34 18.90 + aTenders

Project: Reconstruction Of Hart Street		
20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	36.41	18.90 + a
21) Mucking Machine Operator	39.11	18.90 + a
TRUCK DRIVERS(*see note below)		
Two axle trucks	28.83	21.39 + a
Three axle trucks; two axle ready mix	28.93	21.39 + a
Three axle ready mix	28.98	21.39 + a
Four axle trucks, heavy duty trailer (up to 40 tons)	29.03	21.39 + a

Project: Reconstruction Of Hart Street		
Four axle ready-mix	29.08	21.39 + a
Heavy duty trailer (40 tons and over)	29.28	21.39 + a
Specialized earth moving equipment other than conventional type on-the road trucks and semi-trailer (including Euclids)	29.08	21.39 + 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, Tunnel Boring Machines. (Trade License Required)	38.55	23.55 + a
Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	38.23	23.55 + a
Group 3: Excavator/Backhoe under 2 cubic yards; 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)	37.49	23.55 + a

Proi	iect:	Reconstruction	Of Hart Street
1 10	CCt.	1 to comba action	OI IIuit Du cet

Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper)		23.55 + 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)	36.51	23.55 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	36.51	23.55 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	36.20	23.55 + 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).	35.86	23.55 + a
Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine.	35.46	23.55 + 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).	35.03	23.55 + a

Project: Reconstruction Of Hart Street		
Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.	32.99	23.55 + a
Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment.	32.99	23.55 + a
Group 12: Wellpoint Operator.	32.93	23.55 + a
Group 13: Compressor Battery Operator.	32.35	23.55 + a
Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).	31.21	23.55 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	30.80	23.55 + a
Group 16: Maintenance Engineer/Oiler	30.15	23.55 + a

Project: Reconstruction Of Hart Street		
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	34.46	23.55 + a
		_
Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	32.04	23.55 + a
**NOTE: SEE BELOW		
LINE CONSTRUCTION(Railroad Construction and Maintenance)		
20) Lineman, Cable Splicer, Technician	45.43	6.25% + 20.70
21) Heavy Equipment Operator	40.89	6.25% + 18.56
22) Equipment Operator, Tractor Trailer Driver, Material Men	38.62	6.25% + 17.99

.25% + 11.81
.25% + 16.60
.25% + 16.60
.25% + 16.60
6.5% + 9.70
6.5% + 6.20
6.5% + 10.70
6.5% + 12.20

Project:	Reconstruction	Of Hart Street
----------	----------------	----------------

28) Material Men, Tractor Trailer Drivers, Equipment Operators

35.04

6.5% + 10.45

Project: Reconstruction Of Hart Street

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

ALL Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$3.00 premium in addition to the hourly wage rate and benefit contributions:

- 1) Crane handling or erecting structural steel or stone; hoisting engineer (2 drums or over)
- 2) Cranes (100 ton rate capacity and over) Bauer Drill/Caisson
- 3) Cranes (under 100 ton rated capacity)

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.

Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.

Project: Reconstruction Of Hart Street

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.

Department of Revenue Services State of Connecticut 25 Sigourney Street Hartford CT 06106-5032

(New 06/08)

**CERT-141** 

# **Contractor's Exempt Purchase Certificate**

General Purpose: Contractors for the repair, alteration, improvement, remodeling, or construction of real property use this certificate to purchase materials and supplies to be installed or placed in a project being performed under contract with an exempt entity. The materials and supplies must remain in the project after its completion, including tangible personal property that remains tangible personal property after its installation or placement. If the tangible personal property is not used in the manner described above, a contractor who claimed an exemption owes use tax on the total price of the tangible personal property.

Wherever the term contractor is used in this certificate, it includes subcontractors of the contractor performing a contract with an exempt entity.

**Exempt entity** means any person entitled to make purchases of tangible personal property exempt from sales and use taxes under the statutory authority listed below.

**Statutory and Regulatory Authority:** Conn. Gen. Stat. §12-412(1), (2), (5), (8), (84), (90), (92), (93), and (95); Conn. Gen. Stat. §§7-273mm, 16-344, and 32-23h; and Conn. Agencies Regs. §12-426-18.

Instructions for the Purchaser: Use this certificate for purchases of tangible personal property to be installed or placed in a project being performed under a contract with an exempt entity that will remain in the project after its completion. To qualify for the exemption from sales and use taxes, you must present this certificate to the retailer at the time of the purchase of the qualifying tangible personal property. For at least six years from the date it is issued, keep a copy of this certificate and records that substantiate the information entered on this certificate, including records to support the contractor's use of this certificate and to show the disposition of all materials or supplies so purchased.

If you are unable to designate the exact amount of materials or supplies to be installed or placed in a project being performed under contract with an exempt entity, you must estimate the amount of the purchases. You will be held strictly accountable for any use tax due the state on the purchases in the event of any use other than the permanent installation or placement of the purchases in the exempt project identified in this certificate.

Contractors are the consumers of all the tools, supplies, and equipment used in fulfilling a construction contract that are not installed or placed in the exempt job even if they are used up during the job.

Instructions for the Seller: Acceptance of this certificate, when properly completed, relieves the seller from the burden of proving that tangible personal property is not subject to sales and use taxes when the tangible personal property will be installed or placed in a project being performed under a contract with an exempt entity and will remain in the project after its completion. The certificate is valid only if taken in good faith from a contractor under contract with an exempt entity. The good faith of the seller will be questioned if the seller knows of, or should know of, facts that suggest the contractor does not intend to install or place the property in a project being performed under contract with an exempt entity.

Keep this certificate and bills or invoices to the purchaser for at least six years from the date of purchase. The bills, invoices, or records covering the purchase made under this certificate must be marked to indicate an exempt purchase was made. The words "Exempt under CERT-141" satisfy the requirement.

This certificate may be used for individual purchases, in which case the box marked "Certificate for One Purchase Only" must be checked. This certificate may also be used for a continuing line of exempt purchases for the project identified in this certificate, in which case the box marked "Blanket Certificate" must be checked. A blanket certificate remains in effect for three years unless the purchaser revokes it in writing before the period expires.

For More Information: Call Taxpayer Services at 1-800-382-9463 (Connecticut calls outside the Greater Hartford calling area only) or 860-297-5962 (from anywhere). TTY, TDD, and Text Telephone users only may transmit inquiries anytime by calling 860-297-4911. Visit the Department of Revenue Services (DRS) website at www.ct.gov/DRS to preview and download forms and publications.

Name of Exempt Entity	Address	CT Tax Registration Number (If none, explain.)	Federal Employer ID #
			CT Exemption Permit Number (If any)
Address of Project	L		
Type of Exempt Entity (Check one.)			
☐ State Government	☐ Federal Governm	ment 🗖	Town
☐ School	☐ Fire Department		Police Department
☐ Library	Other (Explain)		
Name of Purchaser	Address	CT Tax Registration Number (If none, explain.)	Federal Employer ID #
Name of Seller	Address	CT Tax Registration Number (If none, explain.)	Federal Employer ID #
Check one box:	☐ Certificate for One Purchase O	nly	
	Declaration by	Purchaser	
The item(s) described above are tangibe exempt entity identified above and will under contract with the exempt entity cuse tax, plus applicable penalty and into for the exemption are not present or are	remain in the project after its cor or a subcontractor of the contractor erest as of the date of purchase, or	mpletion. I declare that the pu or. I acknowledge that the pure	rchaser named above is a contractor chaser will be liable for Connecticu
<b>Declaration:</b> I declare under penalty of and, to the best of my knowledge and bor document to DRS is a fine of not mo	elief, it is true, complete, and corr	ect. I understand the penalty	for willfully delivering a false return
Name of Purchaser			
Ву:			MA
Authorized Signature	Title	1	Date

# BID PROPOSAL SUBMITTAL DOCUMENT for the

# HART STREET RECONSTRUCTION BID NO. 3879

STATE PROJECT NO. 88-185

CITY OF NEW BRITAIN, CONNECTICUT
HONORABLE ERIN E. STEWART., MAYOR

### **BID PROPOSAL SUBMITTAL PACKAGE**

# **TABLE OF CONTENTS**

<u>Title</u>	<u>Page</u>
Statement of Bidders Qualifications / Notary's Certificate	SBQ-1/8
Required Certificates and Forms:	
Prospective Vendor's Residency and Tax Payment Certificate	RTC-1/3
Certificate of Nonsegregated Facilities	REQ-1
Equal Opportunity Certificates	REQ-2/3
Form of Bid / Bid Bond	BID-1/12

### **STATEMENT OF BIDDER'S QUALIFICATIONS**

5.6 Treasurer's name:

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1.	Name	of Bidder
	1A.	Corporation Partnership Individual Joint Venture Other (Check One)
2.	Bidde	er's FEDERAL Tax Identification Number.
3.		anent main office address, telephone number(s) and faxer(s).
4.	Date	organized?
5.	5.1 5.2 5.3	corporation, answer the following:  Date of incorporation: State of incorporation: President's name: Vice-President's name(s): Secretary's name:

6.	If a partnership, answer the following:
	<ul><li>6.1 Date of organization:</li><li>6.2 Name and address of all partners (State whether general or limited partnership):</li></ul>
7.	If other than a corporation or partnership, describe organization and name principals:
8.	How many years have you been engaged in construction under your present firm or trade name?
	8.1 Under what other or former names has your organization

operated?

9.	Contracts on hand: (Schedule these, showing name of project, owner, architect and/or engineer, gross amount of each contract, percent complete and the scheduled dates of completion).
9a.	Please provide company name, address, telephone number and contact person for at least two installations which you have completed similar in complexity and facility usage to that which you are proposing in response to Public Bid that have been in service for at least three years.
10.	General character of work performed by you and work normally performed with your own forces:
11.	Have you ever failed to complete any work awarded to you? If so, note when, where, why:
12.	Within the last five years, has any officer or partner of your organization ever been an officer or partner of another organization when it failed to complete a construction contract? If so, attach a separate sheet of explanation.

13.	Have	you	ever	defaulted	on	а	contract?	Ιf	so,	where	and
	why?										

14. List the major projects your organization has completed in the past five years, giving the name of project, owner, architect and/or engineer, contract amount, date of completion, and percentage of the cost of the work performed with your own forces.

15. List your major equipment available for this contract, stating which is owned and which will be leased.

16.	Experience in work similar in importance to this project and when completed by you.
17.	State the number of years of background and experience of the principal members of your organization, including the officers and the nature of business activity.
18.	Trade References:
19.	Give Bank references and credit available \$
20.	Name of Bonding Company and name and address of agent:

- 21. Attach a financial statement, audited if available, including Contractor's latest balance sheet and income statement showing the following items:
  - A. Current Assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials, inventory and prepaid expenses):
  - B. Net fixed assets:
  - C. Other assets:
  - D. Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries, and accrued payroll taxes):
  - E. Other liabilities (e.g., capital, capital stock, authorized and outstanding shares par values, earned surplus, and retained earnings):
  - F. Name and address of firm preparing financial statement and date thereof:
- 21.1.Is this financial statement for the identical organization named in #1?

If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (e.g., parent-subsidiary).

21.2. Will this organization act as guarantor of the contract for construction?

#### Note regarding financial Statement:

The Bidder financial information will be maintained in confidence pursuant to C.G.S. provision Section 1-19(b)(5), provided that:

- a. Bidder clearly indicates in writing a request that the financial information be maintained in confidence by the City of New Britain; and,
- b. Submission of financial information is made in a separate, sealed envelope clearly marked "Financial Information to be maintained in confidence".
- 22. Will you, upon request, furnish any other information that may be required by the City of New Britain?
- 23. The undersigned hereby authorizes and requests any persons, firms, or corporations to furnish any information requested by the City of New Britain in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated this	day of		
Bidder's Name:			
By:		Official Address:	
Title:			

(Note: the above signature must be notarized on following page.)

NOTARY'S CERTIFICATE:	
STATE OF)	
COUNTY OF)	
	, being duly sworn,
deposes and says that he is	of
	, and that the
answers to the foregoing questions and	all statements therein are
true and correct.	
Subscribed and sworn before me this	day of,
·	
Notary Public	
My Commission Expires:	

# PROSPECTIVE VENDOR'S RESIDENCY and TAX PAYMENT CERTIFICATION

The City of New Britain Code of Ordinances, Sec. 2-575, reads as follows:

Sec. 2-575. Rejection of bid where bidder is in default to City

The agent shall not accept the bid of a contractor who is in default on the payment of taxes, licenses or other monies due the city.

The agent shall include in the bid document a form to be executed by a bidder certifying that said bidder is not in default on the payment of taxes, licenses or other monies due the city.

As used in this section, (1) a "principal" of a contractor shall mean an individual who is a director, an officer, an owner, a limited partner, or a general partner; and (2) "default in the payment of taxes" shall mean failure to pay taxes by the date such taxes are due and payable or the failure to be current with respect to a delinquent taxes payment schedule as set forth in a written agreement with the Tax Collector.

In accordance with this provision, the prospective vendor submitting the accompanying bid for City of New Britain Bid No. **3879** hereby makes the following certifications with respect to the residencies of his firm and the principals thereof:

Firm Name:	_
Complete Business Address of Submitting Office:	
Complete Business Address of Main Office (if different):	

The persons listed on the following pages (make and use additional copies of page "RTC-2\_\_ of 3", if necessary, filling in the "\_\_" in the page number and before the name as appropriate,) including their residency address, and all other requested information, represent all of the principals, as defined previously herein, of the above-named prospective vendor:

Residency Address: Mailing Address (if different):				
·				
·				
Mailing Address (if different):				
Mailing Address (if different):				
Britain which the above-named principal ow				
Britain address of which the above-named				
	Britain which the above-named principal own an interest in; reply with 'none' if applicable:  List below the names and addresses of any	Britain which the above-named principal owns in who an interest in; reply with 'none' if applicable:  List below the names and addresses of any (other) but Britain address of which the above-named principal is	Britain which the above-named principal owns in whole or in page an interest in; reply with 'none' if applicable:  List below the names and addresses of any (other) business e Britain address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also a page and address of which the above-named principal is also and address of which the above-named principal is also and address of which the above-named principal is also and address of which the above-named principal is also and address of which the above-named principal is also and address of which the above-named principal is also and address of which the above-named principal is also and address of the add	List below the names and addresses of any (other) business entities using a Britain address of which the above-named principal is also a principal; reply

Name:	
Residency Address:	
Mailing Address (if different):	
List below the addresses of any (other) prop Britain which the above-named principal ow an interest in; reply with 'none' if applicable:	ns in whole or in part, or otherwise l
Britain which the above-named principal ow	ns in whole or in part, or otherwise l
Britain which the above-named principal ow	ns in whole or in part, or otherwise l
Britain which the above-named principal ow an interest in; reply with 'none' if applicable:  List below the names and addresses of any Britain address of which the above-named principal ow an interest in; reply with 'none' if applicable:	ns in whole or in part, or otherwise l

•	Name:	
	Residency Address:	
	Mailing Address (if different):	
	List below the addresses of any (other) properties britain which the above-named principal ow an interest in; reply with 'none' if applicable:	ns in whole or in part, or otherwise has
	List below the names and addresses of any Britain address of which the above-named prone' if applicable:	

CERTIFICATION IS HEREBY MADE THAT	
(The prospective vendor named above) AND THE	(total number of
principals) PRINCIPALS THEREOF, AS LISTED HERE	IN, ARE NOT IN DEFAULT ON
PAYMENT OF TAXES, LICENSES, OR OTHER MONIE	ES DUE THE CITY OF NEW
BRITAIN AS OF THE DATE OF BID SOLICITATION.	
Signature and Title of authorized principal of named prospective vendor:	Date:
Review by Tax Collector (to be completed for successful	ıl bidder only):
Signature of Tax Official:	Date:

#### CERTIFICATION OF NONSEGREGATED FACILITIES

This Bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Bidder certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The Bidder agrees that a breach of his certification will be a violation of the Equal Opportunity clause in any Contract resulting from acceptance of his Bid. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, color, religion or natural origin, because of habit, local custom or otherwise. The Bidder agrees that (except where he has obtained identical certification from proposed Subcontractors for specific time periods) he will obtain identical certifications from proposed Subcontractors prior to the award of Subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certifications in his files.

Date:	Signed:	
	Title	

#### CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

#### **INSTRUCTIONS**

This certification is required pursuant to Executive Order 11246 (30 F. R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or sub-contract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION BY BIDDER

Bidder's Name:	
Address and Zip Code:	
Bidder has participated in a previous contract or subcontract su     Opportunity Clause.     Yes    No    (If answer is yes, identify the most recent or	
<ol><li>Compliance reports were required to be filed in connection with subcontractor.</li></ol>	such contract or
Yes No (If answer is yes, identify the most recent of	contract.)
<ol> <li>Bidder has filed all compliance reports due under applicable ins Yes No None Required</li> </ol>	structions, including SF-100
4. If answer to item 3 is "No", please explain in detail on reverse s	ide of this certification.
<b>Certification</b> - The information above is true and complete to the belief.	pest of my knowledge and
Name and Title of Signer ( Please Type)	
Signature	Date

#### **EQUAL EMPLOYMENT OPPORTUNITY**

NAME OF PRIME CONTRACTORBID NO. 3879
INSTRUCTIONS
This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or sub-contract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.
Where the certification indicates that the subcontractor has not filed a compliance report due under applicable instructions, such subcontractor shall be required to submit a compliance report before the owner approves the subcontract or permits work to begin under the subcontract.
SUBCONTRACTOR'S CERTIFICATION
Subcontractor's Name:
Address:
Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.  Yes No
<ol><li>Compliance reports were required to be filed in connection with such contract or subcontract. Yes No</li></ol>
<ol> <li>Bidder has filed all compliance reports due under applicable instructions, including SF-100.</li> <li>Yes No None Required</li> </ol>
4. If answer to item 3 is "No", please explain in detail on reverse side of this certification.
<b>Certification</b> - The information above is true and complete to the best of my knowledge and belief.
NAME AND TITLE OF SIGNER (Please Type)
SIGNATURE DATE

#### FORM OF BID

The undersigned bidder hereby submits the following bid for the **Hart Street Reconstruction**, **Bid No. 3879**, in accordance with the Bid Documents for said project. The undersigned has carefully examined and understands all Bid Documents, as listed in Article 3 of the Instructions to Bidders of the "Bid Requirements and Conditions Document"; and has complied with all the provisions thereof in the preparation of his bid. The Undersigned also offers to furnish all plant, labor, material, supplies, equipment and other facilities for or incidental to the construction of said project as required by, and in strict accordance with, the Improvement Drawings and Specifications, and all addenda issued by the Owner and mailed to the undersigned by registered mail, with return receipt requested, prior to the date of bid opening, whether received or not, for the following unit bid prices.

The Bid Unit Price for each item and the Total Amount Bid must be written in words and figures for the Base Bid and any Alternate Bids.

The undersigned bidder acknowledges receipt of the following:

Addendum #	Date	Acknowledged
	<del></del>	
		<del></del>

The total amount of the Base Bid based on the estimated quantities shown herein and as computed by the undersigned Bidder for the **Hart Street Reconstruction**, **Bid No. 3879**, is:

#### ITEMIZED WORK / QUANTITIES

ITEM NO.	EST. QTY.	UNIT	DESCRIPTION AND WRITTEN UNIT PRICE	UNIT PRICE	AMOUNT
0201001	1	LS	CLEARING AND GRUBBING at the lump sum price of dollars and cents.	\$	\$
0202003A	9547	CY	dollars and cents per cubic yard.	\$	\$
0202120A	164	CY	ROCK EXCAVATION (NO EXPLOSIVES) at dollars and cents per cubic yard.	\$	\$
0202351A	206	CY	UNSUITABLE MATERIAL EXCAVATION at dollars and cents per cubic yard.	\$	\$
0202451A	50	CY	TEST PIT EXCAVATION at dollars and cents per cubic yard.	\$	\$
0202503A	6455	LF	REMOVAL OF CONCRETE CURBING at dollars and cents per linear foot.	\$	\$
0202529	310	LF	CUT BITUMINOUS CONCRETE PAVEMENT at dollars and cents per linear foot.	\$	\$
0205001	494	CY	TRENCH EXCAVATION 0'-4' DEEP at dollars and cents per cubic yard.	\$	\$
0205002	49	CY	ROCK IN TRENCH EXCAVATION 0'-4' DEEP at cents per cubic yard.	\$	\$
0205003	2170	CY	TRENCH EXCAVATION 0'-10' DEEP at dollars and cents per cubic yard.	\$	\$
0205004	217	CY	ROCK IN TRENCH EXCAVATION 0'-10' DEEP at cents per cubic yard.	\$	\$

0209001	11457	SY	FORMATION OF SUBGRADE at dollars and	\$ \$
			cents per square yard.	
0212003	3819	CY	SUBBASE at dollars and cents per cubic yard.	\$ \$
0213011A	260	CY	GRANULAR FILL at dollars and cents per cubic yard.	\$ \$
0304002A	1909	CY	PROCESSED AGGREGATE BASE at dollars and cents per cubic yard.	\$ \$
0406170	5	TON	HMA S1 at cents per ton.	\$ \$
0406171	3225	TON	HMA S0.5 at dollars and cents per ton.	\$ \$
0406236	2062	GAL	MATERIAL FOR TACK COAT at dollars and cents per gallon.	\$ \$
0406999A	1	EST	ASPHALT ADJUSTMENT COST at an estimated cost of <u>five thousand</u> dollars and <u>zero</u> cents	\$ \$5,000
0506001	35	CY	CONCRETE FOR STEPS AND COPINGS at dollars and cents per cubic yard.	\$ \$
0507001A	24	EA	TYPE "C" CATCH BASIN at dollars and cents per each.	\$ \$
0507004A	20	EA	REMOVE CATCH BASIN / MANHOLE at dollars and cents per each.	\$ \$
0507022A	2	EA	TYPE "C" CATCH BASIN DOUBLE GRATE  - TYPE II at  dollars and cents per each.	\$ \$
0507048A	2	EA	TYPE "C" C.B. WITHOUT SUMP at dollars and cents per each.	\$ \$
0507201A	1	EA	TYPE "C-L" CATCH BASIN at dollars and cents per each.	\$ \$
0507601A	18	EA	MANHOLE at dollars and cents per each.	\$ \$
0507685A	1	EA	MANHOLE – 6' DIAMETER at dollars and cents per each.	\$ \$

0651001	805	CY	BEDDING MATERIAL at	\$ \$
			dollars and cents per cubic yard.	
0651012A	2482	LF	15" R.C. PIPE at dollars and cents per linear foot.	\$ \$
0651013A	320	LF	18" R.C. PIPE at dollars and cents per linear foot.	\$ \$
0651015A	26	LF	24" R.C. PIPE at dollars and cents per linear foot.	\$ \$
0651743A	704	LF	6" POLYVINYL CHLORIDE PIPE at dollars and cents per linear foot.	\$ \$
0651746A	40	LF	12" POLYVINYL CHLORIDE PIPE at dollars and cents per linear foot.	\$ \$
0811001A	6455	LF	CONCRETE CURBING at dollars and cents per linear foot.	\$ \$
0811002A	50	LF	SPECIAL CONCRETE CURBING at dollars and cents per linear foot.	\$ \$
0815001	100	LF	BITUMINOUS CONCRETE LIP CURBING at dollars and cents per linear foot.	\$ \$
0921001A	25507	SF	CONCRETE SIDEWALK at dollars and cents per square foot.	\$ \$
0922001	83	SY	BITUMINOUS CONCRETE SIDEWALK at dollars and cents per square yard.	\$ \$
0922500	31	SY	BITUMINOUS CONCRETE DRIVEWAY (COMMERCIAL) at dollars and cents per square yard.	\$ \$
0922501	243	SY	BITUMINOUS CONCRETE DRIVEWAY at dollars and cents per square yard.	\$ \$
0924006A	6237	SF	CONCRETE DRIVEWAY RAMP at dollars and cents per square foot.	\$ \$
0924007A	531	SF	CONCRETE DRIVEWAY RAMP- COMMERCIAL at dollars and cents per square foot.	\$ \$
0939001	50	HR	SWEEPING FOR DUST CONTROL at dollars and cents per hour.	\$ \$

0942001	5	TON	CALCIUM CHLORIDE FOR DUST CONTROL at dollars and cents per ton.	\$ \$
0943001	500	MGAL	WATER FOR DUST CONTROL at dollars and cents per mega gallon.	\$ \$
0944002	2388	SY	FURNISHING AND PLACING TOPSOIL at dollars and cents per square yard.	\$ \$
0946001	5	TON	LIMING at cents per ton.	\$ \$
0949000A	92	SY	WOOD CHIP MULCH at dollars and cents per square yard.	\$ \$
0949131A	3	EA	SYRINGA RETICULATA, "IVORY SILK" JAPANESE TREE LILAC 3" - 3 1/2" CAL. B.B. at dollars and cents per each.	\$ \$
0949146A	3	EA	QUERCUS RUBRA, NORTHERN RED OAK, 3" – 3 1/2" CAL. B.B. at dollars and cents per each.	\$ \$
0949164A	7	EA	MALUS "RED JEWEL", RED JEWEL CRABAPPLE 3" – 3 1/2" CAL. B.B. at dollars and cents per each.	\$ \$
0949165A	3	EA	CARYA OVATA, SHAGBARK HICKORY, 3"  – 3 1/2" CAL. B.B. at  dollars and cents per each.	\$ \$
0949356A	9	EA	PRUNUS SERRULATA KWANZAN CHERRY 3" – 3 1/2" CAL. B.B. at dollars and cents per each.	\$ \$
0949446A	10	EA	BUXUS SEMPERVIRENS, "AMERICAN BOXWOOD" CLASSIC, 3 GALLON CONTAINER at dollars and cents per each.	\$ \$
0949834	3	EA	ACER RUBRUM RED MAPLE 3" - 3 1/2" CAL. B.B. at dollars and cents per each.	\$ \$
0949852A	3	EA	ACER SACCHARINUM SILVER MAPLE 3"  - 3 1/2" CAL. B.B. at  dollars and cents per each.	\$ \$
0950005A	2388	SY	TURF ESTABLISHMENT at dollars and cents per square yard.	\$ \$

0952001A	1	LS	SELECTIVE CLEARING AND THINNING at the lump sum price of dollars and cents.	\$	\$
0969062A	15	MO	CONSTRUCTION FIELD OFFICE (MEDIUM) at dollars and cents per month.	\$	\$
0970006	1	EST	TRAFFIC PERSON (MUNICIPAL POLICE OFFICER) at an estimated cost of one hundred fifty thousand dollars and zero cents	N/A	\$150,000
0970007	50	HR	TRAFFIC PERSON (UNIFORMED FLAGGER) at dollars and cents per hour.	\$	\$
0971001A	1	LS	MAINTENANCE AND PROTECTION OF TRAFFIC at the lump sum price of dollars and cents.	\$	\$
0974001A	25	CY	REMOVAL OF EXISTING MASONRY at dollars and cents per cubic yard.	\$	\$
0975004	1	LS	MOBILIZATION AND PROJECT CLOSEOUT at the lump sum price of dollars and cents.	\$	\$
0976002	5400	DAY	BARRICADE WARNING LIGHTS-HIGH INTENSITY at dollars and cents per day.	\$	\$
09077001	50	EA	TRAFFIC CONE at dollars and cents per each.	\$	\$
0978002	50	EA	TRAFFIC DRUM at dollars and cents per each.	\$	\$
0979003	12	EA	CONSTRUCTION BARRICADE TYPE III at dollars and cents per each.	\$	\$
0980001	1	LS	CONSTRUCTION STAKING at the lump sum price of dollars and cents.	\$	\$
0981101A	12	EA	OPPOSING TRAFFIC LANE DIVIDER at dollars and cents per each.	\$	\$

1206023A	1	LS	REMOVAL AND RELOCATION OF	\$ \$
			EXISTING SIGNS at the lump sum price of dollars	
			and cents.	
1208931	100	SF	SIGN FACE – SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING) at	\$ \$
			dollars andcents per square foot.	
1208932A	175	SF	SIGN FACE – SHEET ALUMINUM (TYPE IV RETROREFLECTIVE SHEETING) at dollars and cents per square foot.	\$ \$
1209114	6300	LF	HOT-APPLIED PAINTED PAVEMENT MARKINGS 4" YELLOW at dollars and	\$ \$
			cents per linear foot.	
1209131	700	SF	HOT-APPLIED PAINTED LEGEND, ARROWS AND MARKINGS at	\$ \$
			dollars andcents per square foot.	
1210101	7000	LF	4" WHITE EPOXY RESIN PAVEMENT MARKINGS at	\$ \$
			dollars and cents per linear foot.	
1210102	6300	LF	4" YELLOW EPOXY RESIN PAVEMENT MARKINGS at	\$ \$
			dollars andcents per linear foot.	
1210105	1450	SF	EPOXY RESIN PAVEMENT MARKINGS, SYMBOLS AND LEGENDS at	\$ \$
			dollars andcents per square foot.	
1212001	50	LF	TEMPORARY PLASTIC PAVEMENT MARKING TAPE – 4" YELLOW at	\$ \$
			dollars and cents per linear foot.	
1212010	50	LF	TEMPORARY PLASTIC PAVEMENT MARKING TAPE – 12" WHITE at	\$ \$
			dollars andcents per linear foot.	
1220027	780	SF	CONSTRUCTION SIGNS at dollars and	\$ \$
			cents per square foot.	
1302054A	54	EA	REPLACE CURB BOX at dollars and	\$ \$
			cents per each.	
1303195A	3	EA	REMOVE HYDRANT (WATER MAIN) at dollars and cents per each.	\$ \$
1303204A	3	EA	HYDRANT ASSEMBLY (WATER MAIN) at dollars and	\$ \$
			dollars andcents per each.	

## FORM OF BID - BID NO. 3879

1403501A	10	EA	RESET MANHOLE (SANITARY SEWER) at dollars and cents per each.	\$ \$
1700001A	1	EST	SERVICE CONNECTIONS at an estimated cost of <u>five thousand</u> dollars and <u>zero</u> cents	\$ \$5,000

BID									
TOTAL	AMOUNT	BID	IN	WORDS:					
								DOLLAR	.S
TOTAL	AMOUNT	BID	IN	FIGURES:	\$ 	 	 		

It is understood and agreed to by the bidder that:

- The itemization of the Bid, and the selection of the Bid Items used therein, is at the Owner's discretion, and solely for the Owner's convenience in evaluating and comparing the submitted bids and administering the Contract.
- The Unit Price bid for each item, and the aggregate sum of the Unit Prices multiplied by the corresponding estimated quantity as applied to the project as a whole, includes all plant, labor, material, supplies, equipment, and other facilities necessary for, and incidental to, the construction of said item, complete, fully functional, and properly finished, as required by, and in strict conformance with these Bid Documents, and for the use (or uses) and appearance intended by the Owner.
- 3) The price bid per unit quantity of work in the various items above shall control in contract award herein.
- 4) The quantities noted above are approximate, only being estimated solely for use in comparing bids.
- 5) The Total Bid Amounts entered above, and the bid amount for each item (obtained by multiplying the unit price by the estimated quantity), are included solely for the purpose of checking this proposal and for the convenience of the Bidder.
- 6) The above prices are to be paid for the actual quantities of the items of work in the completed work or structure. Should the dimensions of any part of the work or the quantities of materials used or work performed be different than those designated in this Form of Bid, or on the Improvement Drawings, the actual quantities only will be allowed in measurement.
- 7) In submitting this Bid, the Bidder understands that the Owner reserves the right to reject any and all bids, and to waive any informality in the bidding. The Owner further reserves the right to make the award on the basis of the above bid.
- 8) If written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned after the opening thereof, the undersigned agrees to execute and deliver any Agreement in the prescribed form and furnish the required bonds within ten (10) days after the Agreement is presented to him for his signature.
- 9) The Bidder is enclosing a statement of his qualifications.
- 10) The Owner reserves the right to delete any of the bid items in total or to increase or reduce the quantity of any bid items.

Owner.		•	•
Dated this	day of		
Bidder's Name:			
By:		_Official	
Address			
Title:			

11) The Bidder shall comply with all provisions of the Bid Documents in his prosecution of the Project if awarded the Contract; and all provisions will be enforced by the

#### BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,
, as Principal, and
, as Surety, are hereby held and firmly bound
unto The City of New Britain, as Owner, in the penal sum of
Dollars (\$) lawful money of the United
States, for the payment of which sum well and truly to be made,
we hereby jointly and severally bind ourselves, our heirs,
executors, administrators, successors, and assigns firmly by
these presents.
The condition of the above obligation is such that whereas the
Principal has submitted to the Owner a certain Bid, attached
hereto, and made a part hereof by reference, to enter into a
contract in writing for the project entitled Hart Street
Reconstruction, Bid No. 3879.

#### NOW THEREFORE,

- (a) if said Bid shall be rejected, or in the alternate,
- (b) if said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract (properly completed in accordance with said Bid) attached hereto, and shall furnish the Owner with proper bonds for his faithful performance of said contract and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void. Otherwise, the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of his obligation as herein stated.

The surety, for value received, hereby stipulates and agrees that the obligation of said Surety and its bond shall be in no

#### FORM OF BID - BID NO. 3879

way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporation seals to be hereto affixed, and these presents to be signed by their proper officers.

Made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

By:\_\_\_\_\_

SURETY:

By:\_\_\_\_\_